THE

INDUSTRIAL-

ORGANIZATIONAL

PSYCHOLOGIST

TIP

THE GOLDEN ANNIVERSARY

1946 1996

OF DIVISION 14

1

TIP

THE INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGIST

Editor:

Michael D. Coovert
Department of Psychology, BEH339
University of South Florida
4202 E. Fowler Avenue
Tampa, FL 33620-8200
Phone: 813/974-0482
FAX: 813/974-4617

Editorial Board:

Thomas Baker   J.Philip Craiger
James C. Sharf   Bryan C. Hayes
Karen May   Allan H. Church
Charmine Härtel

Opinions expressed are those of the writers and do not necessarily reflect the official position of the Society for Industrial and Organizational Psychology, the American Psychological Association, or the American Psychological Society, unless so stated.

Manuscripts and News Items:
Two copies (one copy on disk) of articles or news items should be submitted to the editor. Submissions well in advance of the deadline are appreciated and necessary for unsolicited manuscripts.

Deadlines for each issue are:
July issue—May 15 deadline
October issue—Aug. 15 deadline
January issue—Nov. 15 deadline
April issue—Feb. 15 deadline

See TIP online at URL http://cmit.unomaha.edu/TIP/TIP.html

Staffing a $600,000,000 Integrated Steel Mill

Comments by Tom Ramsay

Problem: A large integrated steel mill decided to build a new state-of-the-art manufacturing facility. Their labor agreement required that the facility be staffed by workers whose jobs were eliminated by the new facility. Tests had to be fair, job-related, and required for learning or performing jobs in the new facility.

Approach: We employed a content-related validation strategy in order to meet legal and contractual requirements.

Results:

- Two knowledge and skills tests were developed and used for electrical/instrumentation and mechanical jobs.

- A basic skills test battery was made for seven different production jobs.

- A higher-level basic skills test battery was made for production coordinators (formerly known as supervisors).

- Persons selected for the new facility were described by trainers as the "best qualified learners we've ever had."

A MESSAGE FROM YOUR PRESIDENT

JAMES L. FARR

I want to devote my space in this issue of TIP to an issue that has been the topic of a number of discussions at meetings of SIOP's Executive Committee over the past few years - How can SIOP and I/O psychologists become more visible to organizational brass and government decision makers? And, indeed, as I've learned while digging through minutes of Division 14 Business Meetings from the late 40's, 50's and 60's, this has been a matter of concern to I/O psychologists for a long time (back when we were the Division of Industrial and Business Psychology).

This point was brought home to me again recently when SIOP member Irene Sasaki emailed me to find out if SIOP was involved in a study being coordinated by the Washington-based Council on Competitiveness that is looking at the effects of technology on workplace training effectiveness, including whether technology might enhance employees' motivation to engage in lifelong learning and continuous skill upgrading. I had to admit that I had not heard of this study and neither had other members of SIOP's Executive Committee to whom I forwarded Irene's query. Our ignorance of this study and the apparent ignorance of the Council on Competitiveness about SIOP are even more embarrassing when one reads in the executive summary for the planned study that "the Council will draw upon an affiliate network of 40 of the nation's prominent research organizations, professional societies, and trade associations." While we are currently investigating how we may get involved in this effort, SIOP obviously needs to become more salient to policy makers and other non-psychologists involved in workplace issues.

Detailed examination of this concern will be one of the tasks for our Long Range Planning Committee this year. They (and I) would like your ideas about how SIOP can accomplish greater visibility. To give you a relatively easy way to provide input to us, the following pages contain some open-ended questions related to this topic; you can photocopy these on one sheet and fax your suggestions to me (or mail it). Email me if that is easier.

II. Strategies for Enhancing Visibility of I/O Psychology & SIOP

A. A SIOP message about the value that I/O psychologists can bring to workplace decision making and policy, especially in relation to other professions, should contain these points

_____
_____

B. Send the SIOP message to (people, organizations, government agencies)

_____
_____

C. SIOP should be actively scanning these parts of our external environment for opportunities to "market" our profession and itself

_____
_____

D. Emerging workplace issues that are likely to attract the attention of policy makers and corporate brass

_____
_____

E. Workplace changes that are affecting the relevance and value of I/O Psychology to organizational management and government policy makers

_____
_____

F. Organizational changes that are affecting our relevance and value

_____
_____

III. Other ideas or comments? Not enough room above? Send on additional sheets. Thanks for your help.

Enhancing SIOP's Visibility: My Ideas

To: Jim Farr (FAX: 814/863-7002)
615 Moore, Penn State University, University Park, PA 16802
email: JSF@PSUVM.PSU.EDU

From: _____
_____

I. Organizations To Learn From: Benchmarking and Best Practices

A. These workplace-related professional organizations have the eyes/ears of top organizational management

_____
_____

B. These workplace-related professional organizations have the eyes/ears of government policy makers

_____
_____

C. Contact people with the professional organizations I've listed above that you might contact about how they can their "message" to the right people

_____
_____

(Please include phone, fax, or email numbers if known)

D. SIOP members (including yourself) who are active in or especially knowledgeable about these professional organizations

_____
_____

IOTAS

Michael D. Coovert

There is a lot of excitement in the air about SIOP's upcoming Golden Anniversary. **Laura Koppes** has been working feverishly on it (no summer vacation for Laura!). Lots of big doings are being planned; see Laura's column in this **TIP**.

As part of the celebration, the January 1997 **TIP** will be a special issue. As we go to press, Laura has arranged for some great feature articles.

Jim Farr will present issues related to the establishment of divisional structure in APA and the early bylaws of Division 14—what issues they reflect, committees established, and so forth.

Milt Hakel will inform us on the role of Division 14 in APA and the politics and frustrations that led to the creation of SIOP.

Jim Austin and Paul Thayer will provide a history of informal groups such as the Dearborn and Mayflower.

Frank Landy diagrams genealogy charts of the Presidents of our society.

Phil Craiger computes the evolution of computer use by SIOP members.

Richard Campbell discusses the benefits and effects of incorporation as a society.

Laura Koppes describes what has been done so far to preserve the division's history, and the "new" process for preserving our history. Laura will also present pieces of historical interest to our members.

Mike Coovert and Lori Foster will examine the evolution of the **TIP** from Volume 1, Number 1 (June of 1964) to the present. As the primary communication medium for the society, **TIP** reflects the interests, trends, and issues of the society membership.

Thanks to everyone working to make this a Golden Celebration for our society.

Irv Goldstein has agreed to chair the SIOP Foundation Committee, which will have as its manor charge for this year to establish policies for our Foundation related to such issues as fundraising, programs to be supported, and so forth. Contact Irv or Jim Farr if you have ideas/issues/concerns related to the Foundation; and **Lee Hakel** can provide additional Foundation information as well as accept contribution

Golden Anniversary of Division 14
Update of Special Activities

Laura L. Koppes

Division 14/SIOP has a terrific opportunity to celebrate 50 years of its founding (1946-1996). This is a time to acknowledge the work of our organization, honor our leadership, record historical activities, and recognize our membership. The celebration of the Golden Anniversary of APA Divisions began at the August 1996 APA Convention in Toronto. SIOP's President, Jim Farr, contributed to the celebration by presenting a paper on the first president of Division 14, **Bruce V. Moore**. Additional Division 14/SIOP special events are being arranged to celebrate this anniversary. Activities planned to date include:

* A Golden Anniversary logo was created and is being incorporated into various SIOP materials.

* A Golden Anniversary mug will be available for purchase at the SIOP Conference.

* The Golden Anniversary will be celebrated at the 1997 SIOP Annual Conference to be held in St. Louis.

* Request for history submissions was included in the SIOP 1997 Call for Proposals.

* Kevin Murphy, editor of *Journal of Applied Psychology*, agreed to review and consider a set of history papers for publication in honor of the golden anniversary

* SIOP Executive Committee appointed a historian to preserve SIOP's history.

* A process for preserving the history is being implemented by the historian. Steps for gathering materials have been taken.

* The 1997 January issue of *TIP* will be a special issue designated to the Golden Anniversary. Several articles on the history of the division and selected division archives will be published in the issue.

If you would like to be involved with the planning and organizing of additional activities, and/or if you have any information or memorabilia, please contact:

Laura Koppes, Tri State University, School of Business, 1Univ Ave., Angola, IN 46703. Telephone: 219-665-4183;FAX: 219-665-4830; E-mail: ratcliffl@vax1.tristate.edu.

Changes at TIP

The July 1996 issue of TIP was printed by a new company. After many years of working with Stoyles Graphics, upon receiving a very competitive bid we moved to BookCrafters. Thanks to Lee Hakel and all the staff at the SIOP Administrative Office for making the move seem so smooth.

Since all submissions are now electronic, the overall process is very efficient. We have committed to some tough timelines in order to get you your issues in the most timely manor possible. I also want to thank **Dave Dorsey** for his help in getting the files camera ready.

People on the move ...

• **Michael Efran, Ph.D.** and **H. Ted Ballard, Ph.D.** have recently joined the Applied Research Corporation as Senior Consultants. An independent practitioner focusing on team building and 360/ Feedback, Michael was a faculty member at the University of Toronto. Ted, a licensed clinical psychologist, specializes in executive coaching and assessment and served as President of the Georgia State Board of Examiners of Psychologists.

• **Blake Frank** former head of Personnel Research & Organizational Development for The Southland Corporation has joined the University of Dallas' Graduate School of Management as Assistant Dean for GSM Academic Affairs.

• **Mitchell Lee Marks** has left Delta Consulting Group in New York and relocated to San Francisco where he has established a consulting practice specializing in strategic organizational change, CEO coaching, senior team building, culture change, and the implementation of mergers, acquisitions, alliances, and other major transitions. Mitchell is also completing a book on the planning and implementation of mergers, acquisitions, joint ventures, and strategic alliances.

• **Mark Teachout** has been promoted to Executive Director, Training Systems/Services at USAA.

• **David Zatz** left WLH consulting and started a new firm, Zatz-Houghton Associates. You can reach David at (201) 567-2198.

... and in the news

Dan Landis and **Rabi S. Bhagat** have updated their Handbook of Intercultural Training. The second edition is now available from Sage.

Recent losses to SIOP

Finally, our society is saddened by the loss of members: **Samuel L. Barres, Richard P. Butler, Dr. Wayne R. Lowther,** and **M. Scott Myers.** You can read Lance Seberhagen's obituary of Dr. Myers in this TIP.

If you learn of the death of a society member, please notify me or Lee Hakel in the Administrative Office.

Traveling in CyberSpace:
An Overview of Computer-Mediated Work

J. Philip Craiger
University of Nebraska at Omaha

"Computer-based technologies are not neutral; they embody essential characteristics that are bound to alter the nature of the work within our factories and offices, and among workers, professionals, and managers."

Zuboff, 1988, p. 7

As I indicated in my last column, upcoming installments of Traveling in CyberSpace will focus on the topic of computer-mediated work. Specific topics will include computer-based training, decision-support and expert systems, computer-supported cooperative work, and related topics. Each of these topics falls under the rubric of what is commonly called *electronic performance support systems* (EPSS). EPSS are essentially computer programs that assist workers in accomplishing tasks. Like the tasks for which they are developed, EPSSs vary in complexity. By complexity I mean some programs exhibit what might be called "intelligence." Simple programs include on-line documentation in hyper-text format, such as a help facility for a word processor. Another simple yet intriguing example is a facility in many word processors on the market that behave as "real-time" spell checkers. As I type, if I misspell a common word, my word processor will recognize that *taht* should be *that*, automatically making the change for me without any overt intervention by myself. Highly complex systems that seem to exhibit some degree of intelligence include expert systems: computer programs that are able to emulate human experts (Winston, 1984).

Humans using technology to accomplish tasks is, of course, not new. Levers and pulleys were used by the Egyptians to move the stone and sand blocks to form the Pyramids. Today construction workers use bulldozers and cranes to excavate land and move construction materials. The Chinese developed the abacus to assist in counting and calculating. Today, we have computers, originally developed to crunch large lists of numbers for the military, to do the same thing in a fraction of a second.

In this issue I will provide a brief and non-technical overview of computer-mediated work (unless you really want to discuss the Rete algorithm and gradient descent neural network learning laws). In particular I will describe knowledge-based systems and discuss how they can be used as intelligent advisory systems for workers. I will begin this column by describing how the information age and computers have changed the nature of work.

The progression of our society from an industrial- to an information-based economy has dramatically changed the landscape of work (Coovert & Craiger, in press). Dramatic changes in the jobs that embody organizations have required changes in the knowledge, skills, and abilities required to successfully perform these jobs. Consequently, jobs commonly found in the industrial-age have been replaced by jobs of a fundamentally different structure. For example, many jobs in the industrial age were composed of repetitive and routine tasks accomplished through a symbiotic relationship between the machine and the worker. For these jobs workers' perceptual-motor skills were of primary importance in determining successful task accomplishment. Today, many jobs can be characterized by the context of workers operating within ill-structured and uncertain environments, defined by tasks requiring problem solving and decision making under uncertain conditions. For these jobs information processing and cognitive skills are more important than perceptual-motor skills for task accomplishment.

The importance of information technology in the workplace was quantified in a 1991 study by Digital Equipment Corporation (cited in Turban, 1995). 320 chief executive officers, chief operating officers, and strategic planners of large US firms were surveyed about the usage and importance of computers in their organizations. The results clearly showed the importance of computers in organizations:

- Nine out of 10 respondents indicated that US companies have successfully made computers a vital part of their business.
- 98% indicated that senior executives must understand computers and their business impact.
- 81% indicated that computers were essential to conducting business abroad.
- 88% indicated they are using computers to increase communications.
- 87% said computers have cut the time needed to develop products.

Given that, even as early as 1984, technology halved in price and doubled in power every two years (Feigenbaum & McCorduck, 1983), changes in the technology, and consequently in the jobs themselves, will continue to develop at a dramatic pace. (As an aside, 6 years ago I bought a fairly new desktop computer that had 640K of RAM, a 20 megabyte hard drive, and ran at a blazing 10 MHz. Today, I have a *laptop* that has 32 megabytes of RAM, a 1.2 gigabyte hard drive, and runs at a truly blazing 117 MHz!).

Computers as Problem Solving Aids

The idea of computers as problem solving aids can be traced back to the middle of this century. Newell and Simon (1972), arguably the fathers of artificial intelligence, proposed the use of computer technology to deal with

ill-structured decision problems. In support of their beliefs they offered two arguments as to why computer applications are important, and why they have the potential for widespread applicability. First they argued that computer programs can be used as models to test hypotheses about putative human psychological processes. Of a practical nature, they argued that these computer programs can be used as decision-aids in situations that are considered ill-structured.

Knowledge-Based Systems

Arguably the most frequently deployed EPSS are knowledge-based systems (KBS). KBS are computer programs consisting of two distinct parts: a collection of explicitly represented problem-solving knowledge, and the control structures (algorithms) that use the problem-solving knowledge to arrive at solutions to problems. KBSs are used to assist workers in decision making in numerous fields including manufacturing, medicine, finance, agriculture, and so on.

A decision-support system (DSS) is a KBS that assists workers in collecting, refining, evaluating, and analyzing data for the purpose of decision-making. They have become an integral part of decision-making in many public and private organizations (Johnson & Mulvey, 1995). Corporate managers, in particular are using computer programs that assist them in decision-making (Turban, 1995). The effect of KBS on worker productivity, and the extent the systems were deployed in organizations, was shown in a study by Feigenbaum, McCorduck, and Nii (1989). They conducted an in-depth study of a number of large (e.g., Dupont, American Express, IBM, Toyota, Nippon Life Insurance Company, Sanwa Bank, etc.) and small companies that employ KBS as intellectual assistants on a daily basis. Their study indicated that these systems typically speed up work by a factor of ten, and savings of tens of millions of dollars were common. They noted that these productivity jumps are enormous, given that most economists and business planners suggest that we should strive for productivity gains of 5 to 7%!

According to Hayes-Roth and Jacobstein (1994), the application of KBS in real-world problem situations has exhibited a wide variety of benefits, including:

- order-of-magnitude increases in speed of complex-task accomplishment,
- increased quality of products,
- reduced errors,
- reduced costs,
- decreased personnel required to accomplish tasks,
- reduced training time,
- improved decisions, and

- retention of volatile or portable knowledge improved customer service.

Case Study: An Expert Advisory System for IBM

KBS are particularly well-suited as advisory systems. The extent to which an advisory system is active in assisting a worker in accomplishing tasks can range from self-activating to user-activated. Self-activating advisory systems are particularly intriguing. For particular tasks, rules that track a worker's thinking process can be built into the system. When the system senses a problem, it self-activates, offering the worker explanations, warnings, advisory dialogs, suggestions, or questions (Gery, 1991).

Gery (1991) cited IBM's development and deployment of the Performance/Learning Support System (P/LSS) as an example of a fairly complex, and successful, advisory system. The system was developed as a result of the increasing need to improve and standardize the software application development process. A common problem in software development is that applications are often developed without sound models of data, processes, entities, and the relationships among the three. Common results of these faults are software quality variations, increased maintenance costs and change requirements, and low user-satisfaction.

IBM's solution to this problem was the creation of P/LSS, a computer-assisted software engineering (CASE) tool. CASE tools allow programmers to increase software quality by providing a development environment that is automated and interactive, allowing the representation of complex data, processes, and links in a standardized format.

P/LSS is a complex CASE tool that provided software developers with both performance support as well as training support. In terms of performance support, the system contained a monitoring system that observed the developers activities, self-activating at appropriate times to present the worker with context-sensitive support material. An advisory system worked in conjunction with the monitoring system to provide system-initiated help. For example, if the developer violated a software development rule, or appeared to be taking too long to accomplish a task, the system self-activated, offering advice based on the context of the task.

Several different training modules were available to users based on the level of expertise of the user, even taking into account the learning style of the user. For example, a tutorial module gave new users an overview of the components and resources available within the system. An interactive reference module allowed users to receive context-sensitive help throughout the software development process. A training module provided lessons in question and answer format on various elements of software development and P/LSS. Finally, an assessment module allowed users to evaluate their knowledge of the system as well.

IBM evaluated the success of P/LSS through a usability lab, field tests, and focus groups. Using a pre- and post-test design, the results suggested that P/LSS improved both learning and skills that translated to software development. And of great importance for usability, users exhibited a very positive attitude toward the system.

The Future of Computer-Mediated Work

One of the social and moral issues that has concerned people since the advent of computers is the possibility of human workers being replaced by machines. In some industries this has come to pass, most notably with robots on assembly lines. In general, though, the most efficient use of (intelligent) computer applications involves a symbiotic relationship between the worker and the computer application, with the latter acting as an intelligent assistant for the former (Craiger, 1992; Coovert, 1995). Indeed, an argument can be made that the optimal use of computer programs is as an aid, not replacement, for human workers. Robert Flast, vice-president in charge of transaction services for American Express's Travel Related Services, a "champion" for an expert system that is now employed to evaluate a cardholders creditworthiness, asserted:

"Two years ago I was of the impression that what the world would evolve to is smart machines. Now I'm convinced, more than ever, that the world needs smarter people and smarter machines." (Feigenbaum, McCorduck, & Nii, 1989, p. 114).

References

Coovert, M.D. (1995). Technological changes in office jobs: What we know and what we can expect. In A. Howard (Ed.), *The changing nature of work*, (pp. 175-208). San Francisco: Jossey-Bass.

Coovert, M. D., & Craiger, J. P. (in press). Modeling performance and establishing training criteria in training systems. In J. K. Ford (Ed.), *Improving training effectiveness in work organizations*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Craiger, J.P. (1992). *A heuristic procedure for mapping knowledge, skills, and abilities to tasks*. Unpublished doctoral dissertation. University of South Florida, Tampa.

Feigenbaum, E. A., McCorduck, P., & Nii, H.P. (1989). *The rise of the expert company: how visionary companies are using artificial intelligence to achieve higher productivity and profits*. N.Y.: Random House

Feigenbaum, E. A., & McCorduck, P. (1993). *The fifth generation: Artificial intelligence and Japan's computer challenge to the world*. Reading, MA.: Addison-Wesley.

Gery, G.J. (1991). *Electronic performance support systems*. Toland, MA: Gery Performance Press.

Johnson, D.B., & Mulvey, J.M. (1995). Accountability and computer decision systems. *Communications of the ACM, 12*, pp. 58-64.

Newell, A., & Simon H.A. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice-Hall.

Turban, E. (1995). *Decision-support and expert systems*. Englewood Cliffs, NJ: Prentice-Hall.

Winston, P. H. (1984). *Artificial intelligence*. Reading, MA. Addison-Wesley.

Zuboff, S. (1988). *In the age of the smart machine: The future of work and power*. NY: Basic Books.

SIOP ANNUAL CONFERENCE '97

Adam's Mark Hotel
St. Louis, Missouri
April 11-13, 1997
Workshops: April 10, 1997

Katherine J. Klein
University of Maryland at College Park

Meet me in St. Louis! If you've been to the SIOP Annual Conference before, you know what to expect: a large array of stimulating presentations to choose from, fascinating reports of cutting-edge research, and great conversations with new and old friends. If you haven't been to the Annual Conference before, you're in for a real treat. In either case, you'll leave the Conference feeling inspired, excited, and re-charged.

Hotel, conference, workshop, and job placement registration forms will be available in January. You'll find them in three places: the Conference Registration booklet (to be mailed to all SIOP members in January), in the next issue of TIP (also coming out in January), and on the World Wide Web (http://cmit.unomaha.edu/TIP/TIP.html). One way or another, we want to find you and get you signed up for the Conference.

As always, you can look forward to a terrific conference. Sally Hartmann and the Workshop Committee have planned a great lineup of workshops. Shirley Ross and the Local Arrangements Committee are preparing a guide to help you find the best attractions and restaurants in and around St. Louis. Steve Ashworth is organizing Job Placement Services at the conference. And, by the time you read this, John Hollenbeck and the Program Committee will be wading through a veritable sea of provocative and creative submissions to the conference—the result of your hard work and scholarship.

If you have questions about or suggestions for the SIOP conference, please let me know. I can be reached at (301) 405-5929, or by e-mail: KLEIN@BSS3.UMD.EDU. I'd especially love to hear from you if you think you might like to donate a few hours of your time to SIOP during the Conference itself. We need many volunteers to keep the Conference running smoothly. If you do volunteer, you'll have some fun, you'll contribute to your Society, and you'll get an insider's view of the Conference.

The other members of the Conference Steering Committee would also be happy to hear from you. They are: Jim Farr (President), Mike Campion (Past President), Steve Ashworth (Job Placement), Jack Kennedy (Registration), Sally Hartmann (Pre-Conference Workshops), John Hollenbeck (Program), and Shirley Ross (Local Arrangements). See you in St. Louis!

PREVIEW OF SIOP WORKSHOPS

Sally Hartmann
Sears, Roebuck and Co.

Plan ahead for the Workshops at the next SIOP Conference in St. Louis! The Workshops will be held on Thursday, April 10, 1997 at the Adams Mark Hotel. We provide this early preview to help you with your travel and schedule planning. More detailed information will be provided in the next issue of TIP. Even though the Workshop and Continuing Education Committee members have worked very hard to line up presenters and topics, there may be a few changes prior to publication of the official roster.

Is the Sky Falling? I/O Psychology in a Changing World by Benjamin Schneider, University of Maryland.

Recent Developments in Employment Litigation by Nancy Rafuse, Paul Hastings, Janofsky, & Walker, and Kathleen Lundquist, Applied Psychological Techniques, Inc.

Going Electronic: What to Consider Before Moving Your Survey or Performance Appraisal On-Line by Karen B. Paul, 3M, and Richard L. Brescia, IBM Corporation.

Future Search: Finding and Acting on Common Ground in Organizations and Communities by Sandra Janoff, Search Net.

Team Effectiveness by Michal Campion, Purdue University.

Point Estimates and Confidence Internals vs. Significant Testing by Karla K. Stuebing, FSD Data Services, Inc.

Beyond Language Barriers: Cultural Factors in Implementing I/O Solutions Abroad by Harry Triandus, University of Illinois, and Robert Bontempo, Columbia University.

Downsizing - the Good, the Bad, and the Ugly by Kerry Bunker, Center for Creative Leadership, and Mirian Graddick, AT&T.

Entry Level Management and Professional Selection: Best and Most Common Practices (Are They the Same?) by Nancy T. Tippins, GTE Telephone Operations, and Stephen Wunder, RS Wunder Consulting.

Executive Coaching: Putting the Pieces Together by Skip Leonard, PDI.

Personality and Integrity Testing for Personnel Decisions: Issues and Controversy by Paul R. Sackett, University of Minnesota, and Leaetta M. Hough, Personnel Decisions Research Institutes, Inc.

How Do You Make Surveys Useful? by Alan I. Kraut, Baruch College, C.U.N.Y., and Sarah Johnson, Eastman Kodak Co.

360 Degree Feedback: Delivering on Development by Sarah A. Hezlett, Susan H. Gebelein, and David B. Peterson, Personnel Decisions International.

New Models of HR by Wayne Cascio, Graduate School of Business, University of Colorado.

FIND A NEW HOME?

Stay on top of TIP and all other SIOP mailings.
Send address changes to :
SIOP Administrative Office
PO Box 87
745 Haskins Road, Suite A
Bowling Green OH 43402-0087
FAX: (419) 352-2645
LHAKEL@SIOP.BGSU.EDU

More than a Matter of 'Bootstraps':
Under-explored Contributors to Gender
Differences in Organizational Outcomes

Charmine E. J. Härtel
University of Queensland, Australia

The Vantage 2000 column seeks to provide a forum for discussing the latest in practice, research, and theory with respect to new trends in the workforce and workplace. The informative value of the column depends upon your input. . I am seeking organizations or academic departments to profile which provide examples of applying or researching new methods relevant to a diverse workforce. I am also interested in receiving any newspaper clippings, research-in-progress, consulting tips, emerging controversies, requests and ideas for the column. Please send these to me at: Graduate School of Management, The University of Queensland, Brisbane, Queensland 4072, Australia; Phone: (07) 3365-6747; FAX: (07) 3365-6988; INTERNET: C.Hartel@mailbox.uq.edu.au.

Pull Yourself up by the Bootstraps!

A modern version of the ill-fated sentiment "let them eat cake," this saying seems to be being heard more and more frequently. It is typically directed at people near the bottom such as the homeless, the poor, the unemployed, or minority and women workers. It is a phrase that, on the positive side, suggests that anything is possible for the human will, yet on the negative side, also carries with it the implication that failure to succeed is chiefly due to lack of sufficient character and will. For I/O Psychologists this relates to the debate between the person-centered and situation-centered explanations for gender differences in organizational outcomes. Most of this issue's Vantage 2000 column focuses on new insights into aspects of this debate provided by the latest research available.

Explanations of Gender Differences in Organizational Outcomes

At this year's SIOP conference, Jeff Johnson of Questar Data Systems in Eagan Minnesota chaired a symposium exploring "current research on some of the phenomena that may contribute to differences between men and women in organizational outcomes." The symposium included "new findings on previously under-explored factors that may contribute to gender differences in organizational outcomes."

Caroline Cochran and Jeff Johnson investigated the suggestion by some authors that women do not advance in organizations because they have

Twelfth Annual Industrial/Organizational Psychology Doctoral Consortium

Peter Bachiochi and Steven Rogelberg
Bowling Green State University

Thursday, April 10, 1997 marks the day of the Twelfth Annual Industrial/Organizational Psychology Doctoral Consortium held at the Adam's Mark Hotel in St. Louis, the same site as the SIOP Conference.

The 1997 Consortium program includes an impressive lineup of speakers. Our breakfast speaker who will kick off the day's festivities will be Milt Hakel of Bowling Green State University. Breakfast will be followed by two concurrent morning sessions, one featuring Sara Rynes of the University of Iowa, and another featuring Joe Martocchio of the University of Illinois, recipient of this year's McCormick Award for Distinguished Early Career Contributions.

Lois Tetrick of the University of Houston and Associate Editor of *JAP* will discuss the pleasures and perils of the publication process following lunch. Our two concurrent afternoon sessions will feature Mary Zalesny of the Battelle Pacific Northwest Lab and Jeff McHenry of Microsoft. The final event of the day will be a panel discussion including the above speakers as well as Steve Ashworth of Allstate's Research and Planning Center who is coordinating the conference's placement center services. The panel will discuss career issues and take questions from the attendees.

The speakers, chosen for their outstanding contributions to the field, will provide their unique perspectives on the challenges faced by I/O psychologists today. Some of the topics covered will be establishing and maintaining a research program, balancing multiple demands (both personal and professional), as well as the similar and unique demands of the academic and applied arenas.

Each doctoral program will receive Consortium registration materials by January, 1997. Enrollment is limited to one student per program up to a maximum of 40 participants. We encourage you to nominate students as soon as registration materials are received.

The consortium is designed for upper-level students close to the completion of their doctorates. Most participants will be graduate students in I/O psychology or HR/OB who are currently working on their dissertations. Preference will be given to nominees who meet these criteria and have not attended previous consortia.

If you need additional information, please contact: **Steven Rogelberg, Dept. of Psychology, Bowling Green State University, Bowling Green, OH 43403 Or e-mail at: ROGELBE@BGNET.BGSU.EDU. Or by phone at (419) 372-6940.**

"less positive work-related attitudes than men." They presented data from a wide range of occupations in two large financial institutions in the U.S. ($N=7,685$ and 7,327). Results showed that the "differences between men and women in attitudes such as job satisfaction and organizational commitment can be explained by confounding variables that tend to covary with gender, such as pay level and education." In particular, in the first organization, "upon controlling for pay grade, officer status, supervisor status, marital status, education, tenure, and work status (e.g., full-time), ...women were found to be significantly more satisfied than men overall. In addition, women were more committed and more satisfied with their pay than men. Men still perceived less prejudice and more work group cooperation than women. Similar results were found in the second organization, although the covariates did not have as much of an impact on attitudes as in the first organization. In this organization, women were found to be more satisfied overall and had greater pride in the company before and after controlling for age, pay grade, tenure, job category, shift, and work status. In addition, women were more satisfied than men with senior management, their pay and benefits, training, and recognition for their work. These differences also appeared whether or not the covariates were controlled for. These results imply that, contrary to popular belief, men and women approach work and react to it very similarly, and that the failure of women to advance to higher organizational levels is not due to deficiencies in their organizational attitudes. In fact, in this study women were found to be more satisfied with various aspects of work and more committed to their company than were men." Caroline and Jeff conclude, "This message should be strongly communicated to managers so that the stereotype of women as casual workers who are not interested in promotions or challenging assignments can be eliminated." Another study by Betsy Cooper and Laura Beauvais found no gender differences in job, career, or organizational commitment, no differences in the commitment of married versus single persons, and no differences in the commitment of employees with children versus employees without children. Cooper and Beauvais (1996) conclude their paper, "These results indicate that, while family roles may impact negatively on job involvement, nonwork roles may be more likely to increase career and organizational commitment. That some personal roles were positively correlated with organizational and career commitment supports Kirchmeyer's (1992) hypothesis of an expansive model of personal resources or positive spillover. While this study found no relationships between personal status variables and work commitment, the belief that the relationship exists still persists. Utilization of these demographic variable by companies to establish different career opportunities and programs (e.g., mommy tracks, part-time positions, flexible schedules, etc.), with accompanying differential rates of pay and benefits, seems not only ineffectual but potentially discriminatory (Konrad & Cannings)."

Debbie Gatton, Cathy DuBois, and Robert Faley's survey (1996) of the literature on gender stereotyping of occupations states that "while sex segregation in occupations exhibited somewhat of a downward trend during the period between 1960 and 1990, this trend has been remarkably slow, leaving segregation levels to remain quite high." They note that "while both sexes do share the same job titles in some occupations across organizations across organizations, rarely do they share the same job titles within organizations" and "that sex segregation at the organizational and industry level are also common, even for occupations which seem to be integrated across organizations or industries".

Research by Shane Douthitt, myself, and Sarah Douthitt (1996) found that raters who scored low on a measure of openness or tolerance to diversity gave lower ratings to a culturally different ratee than to a culturally same ratee where both ratees were identically qualified. The work shows that racial discrimination in performance ratings occurs for the diversity-closed segment of the rater population but not (or at least to a lesser degree) for the diversity-open segment of the rater population. Thus, racial discrimination in performance ratings is moderated by the diversity-openness of the rater. Two important implications emerge from their work: (a) ratings that unfairly discriminate among ratees can be predicted from the level of diversity-openness of the rater; that is, diversity-closed persons rate minorities lower than they rate equally qualified majorities. Thus, attending to the diversity-openness of employees is important to organizations on grounds other than morality—it influences effective and optimal utilization of the human talents available to the organization. (b) The finding that diversity-closed minorities and majorities rate culturally-different others worse than equally qualified culturally-similar persons shows that diversity-closedness produces unfair ratings. Diversity-openness does not have this adverse impact.

Two Sides to Everything: Intelligent Downsizing

Ron Shepps, Manager of Organizational Development at Nestle's Frozen Foods in Solon Ohio, shares a clipping from his department's newsletter. The article describes insights "into GE's 'hidden advantage,' or core organizational competency" gained from a personal visit to GE's Industrial Power Systems Division in Schnectady New York. "Under its Chairman and CEO, Jack Welsh, GE has become particularly known for one part of what is visibly and publicly a two-sided strategy for achieving organizational excellence." The article describes this two-sided strategy as follows:

1. The "Jack Welsh Strategy" for GE is not primarily based on dramatic downsizing. It is based on an equal and balanced emphasis between a process of organization building and a twin, or complementary, process of organizational destruction. GE is in pursuit of, and has advanced competencies in, organizational building, using Organizational Psychology, OD, Quality, Cus-

tomer Focus, Management Development, and other tools commonly available to any interested company. GE has no particular edge in this 'second blade' of its two-part strategy, nor is it uniquely capable in the downsizing arena."

2. GE's edge is its handle on managing the twin processes of organizational anabolism and organizational catabolism (to borrow some terminology from biological science). Only at one other place in my job hunting travels, Hewlett Packard, did I see anything so similar. H.P.'s "planned obsolescence" and employee transfer process for its various computer-based business."

The clipping concludes, "Just as the Japanese 'twin' strategy of continuous improvement in quality while simultaneously continually decreasing cost created a hard-to-match competitive advantage for the past two decades, so too has GE's ability of balancing organizational destruction with the planned creation of organizational capability. This strategy has given it a huge advantage in the American business arena, and potentially the forthcoming global competition as well.

Column Mission and Call for Contributions

My goal for this column is to discuss the future of practice and research related to work and the workplace. I'd like to include perspectives from outside North America as well. To this end, I hope that, no matter where you are in the world, you will e-mail, call, write or fax me (see contact information above) with your suggestions, views, requests and contributions (the name of an organization or academic department I can profile in a manner consistent with the goals of this column, newspaper clippings, company program pamphlets, news of research-in-progress, experience with OD and HR strategies/programs and any other information—nothing is too small). I would also be interested to hear what types of information you would like me to share with you from the Australasia region.

References

Bulger, C. A., & Mellor, S. (1996, April). Self-efficacy as a mediator of union barriers and women's participation. In J. W. Johnson (Chair), *Person-centered and situation-centered explanations of gender differences in organizational outcomes.* Symposium conducted at the Eleventh Annual conference of the Society for Industrial and Organizational Psychology, Inc., San Diego, CA.

Cochran, C. C., & Johnson, J. W. (1996, April). Alternative explanations of gender differences in job attitudes. In J. W. Johnson (Chair), *Person-centered and situation-centered explanations of gender differences in organizational outcomes.* Symposium conducted at the Eleventh Annual conference of the Society for Industrial and Organizational Psychology, Inc., San Diego, CA.

Cooper, E. A., & Beauvais, L. L. (1996, April). The impact of personal status variables and role involvement on job, career, and organizational commitments. In J. W. Johnson (Chair), *Person-centered and situation-centered explanations of gender differences in organizational outcomes.* Symposium conducted at the Eleventh An-

nual conference of the Society for Industrial and Organizational Psychology, Inc., San Diego, CA.

Douthit, S., Härtel, C. E. J., Douthit, S. (1996, April). Equally qualified but unequally perceived: General cultural openness as a predictor of discriminatory performance ratings. In J. W. Johnson (Chair), *Person-centered and situation-centered explanations of gender differences in organizational outcomes.* Symposium conducted at the Eleventh Annual conference of the Society for Industrial and Organizational Psychology, Inc., San Diego, CA.

Gatton, D. S., DuBois, C. L. Z., & Faley, R. H. (1996, April). Gender stereotyping of occupations and the corporate culture. In J. W. Johnson (Chair), *Person-centered and situation-centered explanations of gender differences in organizational outcomes.* Eleventh Annual conference of the Society for Industrial and Organizational Psychology, Inc., San Diego, CA.

Kirchmeyer, C. (1992). Nonwork participation and work attributes: A test of scarcity versus expansion models of personal resources. *Human Resources, 45,* 775-795.

Konrad, A. M, & Cannings, C. (1990) *Segregation in the workplace and the mommy track: Sex differences in work commitment or statistical discrimination?* Proceedings of the Academy of Management National Meeting, 369-373.

Renard, M. K. (1996, April). Negotiation of entry-level salaries: Male-female differences. In J. W. Johnson (Chair), *Person-centered and situation-centered explanations of gender differences in organizational outcomes.* Symposium conducted at the Eleventh Annual conference of the Society for Industrial and Organizational Psychology, Inc., San Diego, CA.

Have you visited the TIP site on the World Wide Web?

URL http://emit.unomaha.edu/TIP/TIP.html

Fifth Annual SIOP Road Race

Kevin Williams

The fifth annual SIOP fun run/road race was held in San Diego during this year's annual conference. Runners were treated to a scenic view of the harbor, a pleasant Southern California morning, and a finish that was closer than Michael Johnson's victory in the Olympic 200m final. Alan Walker and Paul Tesluk ran side by side for most of the race and finished in a virtual dead heat with a time of 16:26 for the not-quite-5K distance (2.95 miles). After a few less than agonizing moments, the finish line judges declared Walker the winner. Not far behind were Peter Dominick (16:40), Jeff Conte (16:56), Michael Callans (16:59), Paul Sackett (17:11), and Juergen Deller (17:21). On the women's side, newcomer Rochelle Stratton (17:45) set a blazing pace and held off previous winners Dana Lindsley (18:04) and Margaret Barton (18:48).

Age group and team results are presented below. Pat and Paul Sackett were the fastest forty-somethings, Ray Henson turned in a dazzling 19:41 to lead the fifty-somethings, and Richard Campbell sprinted away with the over-sixty title. Penn State once again ran off with the university/organization title, their fourth one in five years. They may be hard pressed to retain bragging rights next year because front-runners Paul Tesluk (Tulane) and Jeff Conte (LSU) have packed their Ph.D.s, data files, and training flats and headed South. However, team captain Rick Jacobs appeared unconcerned about his team's chances next year. Rick and Dana Lindsley (Performance over Time) repeated their doubles title, while Paul Sackett and Dan Ostgaard (University of Minnesota) took the adviser-advisee title.

Plans are being made for next year's race in St. Louis. Please keep an eye on the TIP homepage for details. Thanks to all who participated in and helped organize the event, and special thanks to Landy-Jacobs, Inc., Frank Landy, and Paul & Pat Sackett for their financial support.

Age Group Results

	MEN	WOMEN
20-29	1. Paul Tesluk (16:26)	1. Rochelle Stratton (17:45)
	2. Jeff Conte (16:56)	2. Cheryl Armstrong (19:26)
	3. Dan Ostgaard (18:26)	3. Erika Ringseis (20:18)
30-39	1. Alan Walker (16:26)	1. Dana Lindsley (18:04)
	2. Peter Dominick (16:40)	2. Margaret Barton (18:48)
	3. Michael Callans (16:59)	3. Jennifer Kihm (21:22)
40-49	1. Paul Sackett (17:11)	1. Pat Sackett (23:17)
	2. Larry Pelensky (17:45)	2. Beryl Hesketh (23:47)
	3. Don Harville (18:48)	
50-59	1. Ray Henson (19:41)	
	2. Peter Scontrino (21:44)	
	3. Dan Ilgen (21:47)	
60-69	1. Richard Campbell (25:09)	

Team Results

University/Organization	1. Penn State University
Mixed Doubles	1. Performance Over Time
	(Dana Lindsley & Rick Jacobs)
	2. Team Sackett
	(Pat & Paul)
	3. PAGSIPers
	(Kerstin Stolzenberg/Fred Morgenson)
Advisor-Advisee	1. Paul Sackett & Dan Ostgaard
	2. Rick Jacobs & Jeff Conte
	3. Michael Coovert & Dawn Riddle
Scientist-Practicioner	1. Rick Jacobs & Dana Lindsley

Selecting SIOP Conference Sites

Kurt Kraiger
T. Evan Abbott
University of Colorado at Denver

As you may have seen in the last issue of TIP, SIOP has selected the site for its annual conferences in the years 2002 and 2003. 2002 will be at the Sheraton Centre Hotel in Toronto, and 2003 will be back at the Hilton at Walt Disney World in Orlando (where we were in 1995). Both are exciting locations. We received very good rates for Toronto, and the Orlando site was a popular destination last year.

The process by which conference locations are chosen is one in which few SIOP members understand, and perhaps fewer still feel they have input into. The purpose then of this article is twofold:

- To explain how SIOP selects a conference site; and
- To present the results of a survey of member preferences for conference locations, conducted at the 1996 SIOP meeting in San Diego.

Choosing a Conference Site

Responsibility. The responsibility for recommending a conference site typically rests with the Chair of the Society Conference Committee. This person visits sites, negotiates a contract, and then makes a recommendation to the Executive Committee; it is the Committee which ultimately selects the sites. Ron Johnson and Bill Macey have ably filled this role since, oh, the days of Calvin Coolidge, and have selected most of the past conference sites, and all future sites through 2001. However, the Conference Chair is also responsible for managing the upcoming conference, a role which can be a full time job in and of itself. So the current Chair, Katherine Klein, asked Kurt to take over site selection responsibilities while she focused on current conference planning.

Factors in Selecting Sites. Lounging by the pool at the Sheraton in San Diego after this year's conference, one of us overheard a couple of members bemoaning the fact that next year's conference will be in St. Louis, quite a change from Left Coast Paradise. One wondered, "Why can't we have our conference in Cancun?" A fair question. Besides the obvious difficulties in explaining to your boss and your spouse that you really are going to network and learn the latest on multi-source job analysis, there are a couple of other important fac-

35

ASSOCIATE PROJECT DIRECTOR

Due to continued hyper-growth globally, International Survey Research Corp. (ISR) seeks candidate for the position of Associate Project Director. Responsibilities will include client liaison, survey design, data interpretation and reporting. ISR is a premier research firm specializing in global management and employee opinion surveys.

Applicants should possess:

- At least 2 years' experience in employee opinion surveying and research

- Ph.D. in behavioral sciences

- A willingness to travel (approximately 50%)

Fluency in a second language highly desirable.

The position is based in Chicago, with opportunities for transfer to other ISR offices in the U.S. and abroad.

ISR

International Survey Research Corporation

Attn: Search Director - TIP
303 East Ohio Street
Chicago, Illinois 60611
FAX: 312/828-9742
Telephone: 312/828-9725

34

tors which could rule Cancun as a possible conference location. What are these factors?

The primary factor is the *size of the hotel*. SIOP currently requires (or prefers) that most of its members be able to stay in the hotel where the sessions are being held. This usually requires a block of 700-800 rooms. The issue is one of convenience for members, not having to cross the street during a rainy April morning, or of avoiding the feel at APA conventions where you spend your day racing from hotel to hotel finding your sessions. However, this requirement greatly limits our options on *where* we can go. Some hotels prefer to hold out 10-20% of their rooms, and there are only about 30 hotels in the country (and none in Cancun!) with a 1,000 or more guest rooms.

In addition, in the hotel business, we are referred to as size-intensive. For the size of our group (and the total room block), we tend to take up most or all of the available meeting space. There are some hotels that are understandably uncomfortable signing away all of their meeting space and being left with 200 rooms (since they have no meeting space to offer other smaller groups). Thus, by asking for about 750 guest rooms, we are too big for many hotels, and too small for those with more guest rooms but smaller meeting space.

A second factor is *timing*. Our conference is normally held between early April and mid-May, excluding the weekends of Easter, Passover, and Mother's Day. Holding the conference prior to April cuts into spring break and would exert considerable pressure on the program committee to complete the program. Later than mid-May interferes with summer schedules and results in higher room rates as hotels enter peak seasons. Thus, we are now limited to finding a hotel for one of three weekends in April or May. For a conference this size, it is wise to plan out dates 5 to 7 years in advance to make sure that there are sites available. However, different cities operate under different timetables. Five years is a good range for Chicago or Toronto, but Denver books no more than 2 years out and San Antonio sometimes books 7 years out. Thus, the combination of dates and years may rule out the availability of some hotels and some cities.

A third important factor is *price* and *location*. If you're a graduate student or junior faculty member looking at a $130 a night hotel rate, you might be thinking of calling Tom Bodette and wondering if price is ever a factor in choosing a site. However, given our space needs, we are clearly limited to downtown hotels, and downtown hotels charge downtown hotel rates. However, there are rate differences among hotels within a city, and even greater differences across cities. East Coast cities such as New York, Boston, and Philadelphia would

charge $25 to $50 more per night than Southern or Midwestern locales. Popular vacation destinations (e.g., San Antonio, Seattle, San Francisco) are also considerably more expensive. Sometimes a particular city may be chosen primarily because it is less expensive, and there is a more expensive city in either the prior or subsequent year. In addition, there is an attempt to vary the geographical locations from year-to-year. Since many of the upcoming conferences will have a Southern feel (Atlanta, Dallas, New Orleans), we tried hard to find Eastern (Orlando) or Midwestern (Toronto) locations for 2002 and 2003.

A fourth factor is *service orientation* of the hotel or the staff. I suppose we're practicing what we preach. The experiences of Committee members working with the staff of the Hilton in Orlando and the Sheraton in San Diego were very positive. The hotels were supportive, reliable, and things ran well. This experience played an important part in our decision to go back to both hotels. In addition, different national sales staffs or city convention bureaus respond differently to inquiries about conference sites. One hotel in a very desirable location failed to follow up on a call on three separate occasions; two other midwest city convention bureaus promised to have a sales representative call, and none ever called. On the other hand, the national sales team and individual hotel sales managers for the Hilton and the Sheraton have been very reliable and very easy to work with. While not the *key* factor, this orientation is nonetheless important.

Selection Process. Briefly, in order to select a conference site, the following steps are undertaken:

- National sales offices of major chains and/or convention bureaus of targeted cities are contacted with our requirements for dates, guest rooms, and meeting space
- Follow-up discussions are held with hotels that indicate an interest in hosting the conference; brochures and meeting space floor plans are also reviewed
- Site inspections are held at multiple hotels in the same city or in different cities; the inspections are necessary to ensure that the meeting space is adequate, to get a feel for traffic flow about the meetings, and to get a sense of the look of the hotel and the willingness of the hotel to work with our Society
- A proposal with a rate structure is solicited from multiple hotels; the rates and aspects of the contract are negotiated with each hotel to get the best deal for the Society

- A recommendation is made to the Executive Committee; this recommendation is based in part on the negotiated price, but also on the other factors discussed above.

Member Preferences for Locations

In order to better understand the preferences of members for future locations of the SIOP conference, a survey was designed and distributed to attendees at the business luncheon at this year's conference in San Diego. 1,200 surveys were distributed, and 649 were returned for a response rate of 54%.

The survey included 12 variables that could be considered in choosing a conference site. These variables took into account economic considerations, travel, housing, and entertainment options. Several demographic questions were asked, as well as an open-ended question soliciting suggestions for future conference sites.

Responses to the demographic questions are interesting because they provide a profile of who attends the conference (or, at least, who attends the conference and completes a survey during the luncheon). Answers to these questions also provide a context for interpreting the other data collected on the survey.

Of those completing the survey:
- 53% were Members or Associate Members in the Society
- 37% were Student Affiliates
- 10% were Non-Members

Data on the occupations of respondents were also interesting. Of those responding to the survey (and including student responses), there were more non-academics than academics. Respondents' primary work setting were as follows:
- 40% were in academic settings (30% psychology, 10% other)
- 23% were in consulting
- 27% were in private or public organizations or others

Of primary interest was the respondents' ratings of the importance of 12 variables for selecting a conference location. Ratings were on a 5-point Likert-type scale indicating the extent to which the factor *should be* important in choosing a site. The mean and standard deviation of each variable is shown in Table 1. The variables are re-ordered according to perceived importance.

Table 1. Ratings of Importance of Variables for Choosing Conference Sites

Variable	Mean	Std.
Geographical appeal of the city	3.93	1.11
Diverse and affordable restaurants	3.61	1.03
Resort-like accommodations	3.61	1.04
Affordability of rooms	3.57	1.14
Affordability of airfare	3.48	1.25
Proximity of location	3.45	1.22
Attractive guest rooms	3.36	1.04
Attractive meeting rooms	3.36	1.07
Warm climate	3.33	1.26
Availability of low-cost student rooms	3.33	1.50
Available night-time entertainment	2.95	1.22
Available family entertainment	1.97	1.14

We wrote the items to tap several underlying dimensions which we believe SIOP members consider when considering where they would like to see their conference. To determine whether these dimensions were evident in the data, we conducted a factor analysis on the ratings of these 12 variables. The factor analysis revealed three factors underlying the data and accounting for about 54% of the common variance. Factor 1 had an eigenvalue of 2.89 and accounted for 24% of the variance. We called it "C'est Chic" since it was defined by variables such as Resort-Like Accommodations (loading=.75), Attractiveness of Guest Rooms (.69), Geographical Appeal (.66), and Warm Climate (.57). The second factor had an eigenvalue of 2.23, accounting for an additional 19% of the variance. We called it "C'est Cheap" since it was defined by variables such as Affordable Airfare (.82), Affordability of Rooms (.81), and Available Student Rooms (.64). The final factor had an eigenvalue of 1.28, ac-

counting for 11% of the variance. We called this factor "Say Cheese" since it was defined primarily by Available Family Entertainment (.41) and Available Night-time Entertainment (.48).

In order to determine whether preferences for these factors differed by demographic categories, we first calculated factor scores for each variable by summing across the primary variables loading high on that factor. We then ran three multi-factor ANOVAs (one for each dependent variable) treating Affiliation, Work Setting, and Geographical Location as the independent variables. There were no main effects for any independent variable on any factor score.

We then ran two discriminant analyses on set of 12 dependent variables, one with member versus non-members (including students and associates), and one with academic versus non-academic as the independent or group variables. In both analyses, a number of dependent variables discriminated between group membership on the independent variable. Variables discriminating member from non-members were: affordability of airfare, attractiveness of guest rooms, attractiveness of meeting rooms, available night-time entertainment, affordability of rooms, and available low-cost student rooms. Note that these tended to be the more lowly rated variables in Table 1. Generally, non-members assigned higher ratings to these variables than did members, suggesting that non-members are more price conscious than are members.

Variables discriminating academics from non-academics were: Affordability of airfare, attractiveness of meeting rooms, affordability of rooms, and available low-cost student rooms. Generally, academics assigned higher ratings to these variables than did non-academics, again suggesting that they are more price conscious.

Finally, respondents were asked to list what locations they would like to see the conference planning committee consider for the years 2004 and beyond. Respondents were not restricted in the number of cities they could list as desired locations. Cancun did not make the top 10, but a number of other attractive locations did. The list of cities most frequently listed is shown in Table 2.

It should be noted that SIOP will be going to New Orleans and Atlanta in the next 5 years. Denver, Chicago, and Boston are among the cities being considered for 2004. It should also be noted that Vicki Vandaveer alone voted 150 times for San Antonio, but her attempt to "stuff the ballot box" was discovered, and so discounted.

Table 2. Ten Most Commonly Suggested Conference Sites

City	Number of Listings
1. Seattle	164
2. San Francisco	119
3. New Orleans	113
4. Denver	104
5. Boston	93
6. New York	91
7. Vancouver	84
8. Chicago	70
9. Phoenix	68
10. Atlanta	66

Conclusions

While there is general overlap between the rated importance of the variables in the survey and the weight they currently receive in the site selection process, there are some differences as well. Price is one factor rated important in the survey and also considered important in the selection process. Geographical location is also important to both members and planners. However, members would give preference to warmer, more appealing sites (or resorts like Disney), while the planning committee tends to give preference to ease of access, or to moving the location from region to region across conferences. Finally, it should be noted that the two most important factors in selecting a site—the size and the availability of the hotel - were not included in the survey.

All that being said, it occurs to us that there may be some advantages to a future conference in Cancun. At least it warrants looking into ... at least a fact-finding mission to Cancun on behalf of the Society ... maybe this winter....

Practice Network

Thomas G. Baker
ESS, Corp.

Practice Network is dedicated to the discussion of issues of interest or import to the Industrial-Organizational practitioner. This edition encompasses quite a mélange of topics. I am always available to speak with you at my new number of (614) 337-9073 and hope you find something of interest in this issue's features.

Mel Brooks Was Right...[1]

Rich Arvey (U. of Minnesota) was involved in one of those you-won't-believe-it trials. As the plaintiff's expert witness, he testified about the concerns he had with a company rehiring a convicted workplace murderer who eventually murdered a second company employee. Suffice to say, he found a fault or two.

If there is *any* silver lining to these tragic events, they started Rich thinking about the role of emotionality in the workplace. Along with Gary Renz, Rich has spent a considerable amount of time investigating this under-studied area. His conclusions include:

1. Opening the predictor space to include constructs of emotionality may enhance your validity coefficients.

2. There isn't a unified model of how emotionality impacts the workplace, beyond issues relating to workplace violence, the effects of stress on job performance and pieces on "emotional labor" (e.g., the exhausted ever-smiling airline stew).

3. Measurement instrumentation for emotionality constructs for the working world are almost non-existent.

In other words, this field is wide open. Issues such as workplace violence and sexual harassment can almost—intentionally or unintentionally—have organizations attempt to curtail normal, emotionally tinged relationships between people. "You have to be careful of the extreme cases (of violence or harassment), but cannot police every emotional 'twitch' in the organization," Rich observes. "You also can't slice emotions out of the workplace."

The Uniform Guidelines focus testing on issues directly related to job performance and define performance in terms of traditional, formal job tasks. Other non-task related aspects of work have not been viewed as legitimate criteria. This has been challenged by the rise of non-traditional performance factors such as contextual issues popularized by Wally Borman and Steve Motowidlo, personality factors and, Rich feels, by issues of workplace emotions. Expanding the scope of both predictors and job per-

formance criteria is, according to Rich, "A very healthy outgrowth of recent theoretical work."

This baby is so wide open it's hard to know where to start. From a practitioners perspective, Rich is currently working to validate a predictive emotionality instrument for the selection of bus drivers. In general the validation of emotionality measures is needed. Another field level issue is in the 'management of emotions' in the workplace. The question here is: To what ends? Do we want to manage emotions out of the workplace—what is the end state we wish to achieve? This training and organization development issue is, as others on the subject of emotionality, wide open.

Rich Arvey, thanks for sharing some of your recent research with *Practice Network*! Rich also recommends you pay attention to the work of Art Brief from Tulane for some of his OB work on mood and affect in the workplace.

Art feels that "we are beginning to see the affective revolution in I-O psychology, following the lead of social psychologists," in regards to the many people doing research and practice in this area who are recently getting into print. He recommends two readings on this subject: (a) Jennifer George's chapter in Murphy's Frontier Series book,[2] (b) a research stream on the topic of emotional labor by Bob Sutton and Anat Rafaeli (see below). One of his own recent pieces of research showed the susceptibility of employees to mood manipulation and the effect of mood on surveys of job satisfaction.[3] Feed 'em cookies and lemonade if you want to enhance your companies job satisfaction survey rating.

Emotional Labor

For more than 10 years Bob Sutton (Stanford U.) and Anat Rafaeli (Hebrew U., Jerusalem) have studied the topic of emotional labor (does this make it a labor of love?). *Practice Network* was pleased to catch Anat stateside recently to get her opinions on this topic.

Anat clarifies that emotional labor, which she describes as one node on the spectrum of emotionality in the workplace, is the "display or expression of emotion as a part of a work role. It is like 'putting on a mask' of a particular emotion." Although it has most often been studied in the context of customer service work, emotional labor includes a wide range of emotional states, from the aggressiveness of police interrogators to the somber demeanor of funeral directors.

Anat and Bob identified two dimensions to emotional labor. (2 x 2 matrix, stage right.) One dimension relates to the type of emotion expressed by the employee (positive/nice or negative/nasty). A second dimension addresses the influence the expressed emotion has on the target person/customer (enhances their self esteems vs. deflates it). Funeral directors express negative emotions that are intended to enhance the self esteem of their targets. Bill collectors express negative emotions intended to deflate

their target's self esteem (or wallet, whichever comes first). "Displays of emotion evolve from explicit or implicit organizational rules and socialization procedures, from cues provided by the target person or from the context of the interaction itself," Anat says.

One of Anat and Bob's most often cited studies[4] developed the concept of busy and slow store norms. In busy stores, the norm is towards efficiency and away from smiling and significant interpersonal interactions. Slow store norms involve much more interactive, friendly interpersonal contact between employee and customer. "What we argue is that customers get upset if these norms are violated," she says, emphasizing the importance of this finding for customer service training. When all hell is breaking loose, customers don't want a smile, they want speed and efficiency.

Anat postulates the extension of these findings to internal customer relationships, boss to secretary, peer to peer. She also has some cross cultural findings on emotional labor, such as (a) norms or masks differ (between California and Israel, for example) but norms about emotional display exist in both places, and (b) there is a difference in the influence level of the target person, between different industries and different cultures. For example, the influence of a target person is stronger in Israel perhaps because it is a more collectivistic culture.

Theoretically, emotional labor masks do not affect an employee's personal emotional feelings. However, Anat notes that research shows that barriers between expressed and felt emotions cannot be kept up for long.

For reading on the subject of the nonverbal display of emotion, Anat Rafaeli recommends the work of **Arlie Hochschild** (1983)[5] and **Paul Ekman**.[6] Ekman also has done some work with **W.V. Friesen** on displayed cues which tell us whether a feeling is felt or feigned.[7] Thanks Anat for speaking with *Practice Network*!

Sexual Harassment Tax Equity Act

A bill was introduced in the US House (HB 3530) on 5/23/96 to provide a deduction for legal expenses of employees who bring sexual harassment suits against their employers. This bill was introduced by Representative Lofgren (D-California) and is now in the House Committee on Ways and Means (TB: as of early August).

This bill provides a tax deduction for the amount paid during the taxable year for reasonable legal fees for employees bringing sexual harassment suits against their current or former employees. If enacted, this bill would amend the IRS Code of 1986.

Brother, Can You Spare Me A Tylenol?

Pick a number, any number: $50-100 billion annually, 25% of workers' compensation costs, 8% of payroll. (TB: If none of these numbers grab you—we gotta talk!) Back pain is the nation's most expensive industrial injury and, no doubt, one of its least glamorous. It just don't have that swing...expect in the eyes of **Dave Robinson** (Worker Rehabilitation Associates Inc., Boulder, CO).

As Dave quotes **Wilbert Fordyce** of the University of Washington's Department of Rehabilitation Medicine, "it's unclear whether chronic back pain is a medical problem with social aspects or a social problem with medical aspects."[8] Dave believes that "we have not directed I-O psychology's attention to this expensive problem. As a science and a profession, we could do something here which would be highly cost-effective and welcomed by companies."

The Boeing Company has undertaken a couple of well known studies investigating the role of psycho social, workplace and other non-medical factors in chronic back pain. A 1992 predictive validity study by **Stanley Bigos** et al,[9] with an $N > 3,000$, found that (a) biomechanical and ergonomic factors did not prove to be predictors of subsequent back injuries, (b) employees lower on job happiness measures were 2.5 times as likely to file back injury reports as those who were satisfied with their jobs, and (c) those higher on Scale 3 of the MMPI ("Hysteria") were twice as likely to file back injury reports. A second Boeing study further examined the role of personality factors as a predictor of back injury. Taken together:

[The Boeing studies] suggest that mood or psychological state may have greater predictive power, albeit modest, than do biomechanical or ergonomic measures in many work situations. At the least, these studies indicate the importance of psychosocial factors in determining who complains of pain.[10]

Dave feels, "Using standard I-O technology, we ought to be able to spot these people early. When certain threshold values are crossed (e.g., certain diagnoses, medical treatment cost, number of days off work, etc.), it would trigger appropriate review by case managers specializing in mobilizing appropriate multidisciplinary resources to help return these people to productivity. A paper by Engel et al[11] shows a promising start along this line."

Dave is looking for a self-insured company large enough to enable demonstration of stable statistical relationships between predictors and multidimensional cost criteria. HMOs won't do because they don't capture enough criterion data. If you are part of a large company, you might think about giving Dave a call. If the research were fruitful, you could save your company a bundle (read: be a big hero!).

For further information, Dave recommends (a) that you contact the International Association for the Study of Pain (IASP) at (206) 547-6409 and

A Personal View of Empowerment

Lynn Summers (Peace College, Raleigh, NC) became interested in empowerment in the late 1980s after hearing Paul Banas and Ray Sauers conduct a seminar on their exploits at Ford. Lynn was working in the training department of a fast food chain at the time and began conducting some skunk work projects in a number of locations—wherever operations management would let him come in and disrupt things.

By 1990 empowerment was seen as a means for improving customer service and increasing sales and Lynn was helping to "spread it" throughout company-owned restaurants. Lynn found a palpable difference between empowered and non-empowered restaurants. There was a liveliness and vibrancy in the air of the empowered restaurants. He began to attribute success to the presence of a restaurant and district manager who actively supported and championed the concept. Lynn had not thought it possible to empower minimum-wage fast-food workers accustomed to following detailed procedures and supervisory direction for practically every aspect of their on-the-job behavior. As he reflects back on the experience, he is reminded of Oliver Sacks' *Awakenings*, where patients in catatonic states came to life after treatments with dopamine. Employees became involved in roast beef waste control teams, handled customer inquires and complaints and—most importantly—were excited about it!

The empowerment initiative, however, was not sustained. Changes came to top management and greater emphasis was placed on traditional methods for achieving sales and profits. Empowerment was quickly forgotten and, like Oliver Sacks' patients, restaurant crews returned to their disempowered former selves.

Based on survey data Lynn was able to collect, his best estimate is that the empowerment effort made a significant impact in 10-20% of the restaurants. In the restaurants where empowerment did take, it was because of enthusiastic managers who understood the process, pushed responsibilities out in a disciplined way (rather than just turning over the key to the crew), changed their own behaviors to be consistent with the new responsibility arrangements and repeatedly talked to their crew about their goals and the criteria they should use for making decisions on their own.

In conjunction with Ben Rosen, Lynn created an empowerment model and accompanying survey. The Personal Power scale of the survey consists of 12 items (e.g., "I have all the power I need to make sure the work gets done right," "I can call a meeting of my work group to solve a problem."). Reliability of the scale is .85 however a test-retest coefficient over 6 months yielded only .40. The thing that most dramatically boosts (or deflates) empowerment scores for a team is a change of supervisor. Lynn could clearly tell just by looking at pre-post differences which teams had gotten new supervisors in the interim. Some of that appears to be a culprit affecting the low test-retest numbers.

check out it's cleverly titled journal, *Pain*, or (b) contact Dave Robinson at (303) 581-9778 or email at robddr@aol.com.

Are We Now Where We Were Then?[12]

Practice Network recently had an interesting conversation with Keith Pyburn (attorney, New Orleans). As reflected in the title of this piece, Keith is concerned about our not learning from testing litigation's historical past. He is concerned about our capability of redoing mistakes that brought us such gifts as *Griggs v. Duke Power Co.* Keith hopes we continue to make inroads in using tests in a non-discriminatory manner, but feels that there are forces which could soften or undermine our pursuit of this goal.

The first issue, based on a careful, if imperfect, review of legal literature, is a decline in the number of cases being settled that involve testing and validity issues. "As to the number of reported disparate impact challenges to paper and pencil cognitive tests, the trend is downward—this is pretty clear," Keith says. This is also at a time when, over the past 10 years, more paper and pencil tests are in use. Keith grants the less than perfect statistical nature of this conclusion but notes that anecdotal evidence supports the same conclusion.

The second force at play here relates to recent high profile, successful challenges to affirmative action (e.g., Adarand and Hopwood). Keith is concerned that employers will make the mistake of backing away from affirmative action efforts as these high profile challenges to such programs increase.

It's a recipe for failure: Less challenges to test validity mixed with a perceived less supportive affirmative action atmosphere. Does this mean you can do what you want with tests, without establishing validity or tracking impact? Keith sounds an emphatic, "No!"

He recommends we continue to search for the "wiser roads to follow, to reduce adverse impact through legitimate means." He emphasizes he is not suggesting we discard cognitive testing, but reaffirms it is in our tool kit to reduce the impact found in these tests, and, moreover, it is in our best interest to do so. "If you forget our history, you may be a prime candidate for being part of a new wave of litigation," Keith cautions.

Coming Soon

Walt Freytag reports that the final draft of the SIOP Member Referral Directory is currently being reviewed by SIOP's Professional Practice committee. This directory is being established to provide business, industry and organizations with a listing of SIOP members available for I-O consulting. This non-endorsed listing will be setup on TIP's homepage (http://cmit.unomaha.edu/TIP/TIP.html). Look for it!

The predictor was not adopted after it was noted that damage cap in wrongful death cases was $100K, but a constitutional claim (e.g., of privacy or liberty interests) had essentially no limit. Wounding or killing institutionalized kids is often cheaper than offending folks.

Those of us in government and large private organizations know that political issues, public relations and economics are both real and important, crucial to organizational security and survival, but Jeff argues that our propensity for settling cases is often short-sighted, and detracts form long-term organizational security. Settling resolves the immediate issue, but organizational costs can be tremendous, although difficult to quantify, especially in comparison to risks associated with a pending lawsuit.

Jeff sees two primary costs to an organization's inclination to quickly settling employment cases to avoid publicity. (Of course, a company's first self-deception is that confidentiality agreements in settlements hold water.) The first cost is that to a hungry plaintiff's attorney the idea of a quick settlement with low associated costs can make marginal cases appear far more attractive. Federal law enforcement folks don't make deals with terrorists because they believe that to do so encourages more terrorism. The second cost of the impact of settling frivolous cases has on an organization is even more insidious. Employees view settlement of a case in which they know they are in the right as a lack of organizational support for their activities and for them. This, Jeff Feuquay believes, poses an incalculable risk to organizational security. When doing one's job well results in condemnation, motivation to do so cannot remain high. That's Psychology 101 stuff. While settlements set no legal precedent, they do set precedents.

We I-O Psychologists must devise more effective ways to communicate the costs of settlements to those charged with defending us. Lawsuits will come, Jeff asserts. Instead of running from shadows, we must examine how real and important are the perceived challenges to our public relations and economics, both in the specific and, at least as importantly, over the long term. You can reach Jeff at (405) 336-4145.

Self Assessment Tools

For those I-O practitioners peripatetically inclined (TB: read this as an obtuse reference to job hunting), *Practice Network* has come across two self-assessment tools for the I-O psychologist.

One, focused on OD skills, is grouped around six dimensions (e.g., Contracting, Intervention implementation) and consists of about 60 specific behaviors (e.g., "Made it clear what you could do and not do for the organization", and "Brought top-level management together to collaborate in the intervention/consultation"). **Jim Eubanks** (Central Washington University) and cohorts put it together around 1990 and call it the Consultant Competency Inventory. Nothing formal or glossy. Use it to assess your

Lynn has continued to deliver the survey to this employer annually over the past 5 years, using the results in the traditional survey OD manner, both as a scorecard and as a way to identify problems and initiate action. Empowerment has trended slightly upward, but there is one problem that continues to plague most of the work teams—the problem of the maverick team member. This is the team member who doesn't contribute. Back in the days before empowerment, mavericks were the employees supervisors couldn't figure out how to handle. Now they pose the same problems for employee teams.

Lynn Summers feels the phenomenon of empowerment is difficult to achieve, frightfully next to impossible to maintain, and liable to implode at the slightest slacking off of management energies. Thanks Lynn for sounding off to *Practice Network*!

Running From Shadows and Nuisance Law Suits

Practice Network has recently been in contact with an outspoken attorney (and yes, a pot of boiling water *is* likely to be hot). Jeff Feuquay (also an I-O psychologist living in Perry, OK) submits the following treatise with a warning that it is NOT founded on careful research nor based on careful analyses of societal and legal trends. From the soapbox....

Jeff's beef is with the harmful effects of quick settlements of nuisance employment cases. Many attorneys make their living off pushing them because there really are not that many good cases, certainly not enough to feed and clothe the number of attorneys now practicing.

Here are three anecdotes on how we encourage lawsuits:

1. A person applied to be a fairly high level affirmative action officer. The organization's recruiter noticed the applicant claimed 2 years of professional work directing the AA program for a major corporation overlapped with his high school attendance. Hmmmm... This applicant was rejected. When the applicant's attorney contacted the administrator of the organization, the applicant was hired because, "We don't need the hassle or bad press."

2. A 60 year old file clerk complained repeatedly that a young mail coworker was saying "Yo Baby!" each time he came into her work area. Later, she was fired for being drunk enough after lunch to vomit into a file drawer. She won $12K in a settlement after she sued alleging retaliatory discharge by her supervisor who she alleged was jealous of the male's sexually oriented propositions (TB note: she didn't allege sexual harassment, she alleged jealousy). The organization rationalized that outside counsel would cost at least that much to fight the case.

3. A psychologist discovered a thoroughly validated predictor of a person's propensity for abusing children. This test could be used to test direct care providers of institutionalized children. General Counsel questioned how the organization would respond if one false positive applicant sued.

This issue's featured listserv—you only need a lowly Email connection to participate—is ODNet, sponsored by the Organization Development Network (a really active group, I bet their listserv hums!). To get involved in ODNet, send an Email to majordomo@lists.odnet.org, leave the subject line blank and in the body of the Email type "subscribe odnet" (without the quotes). About 225 folks are on ODNet—you'll get mail, don't fret.

An essential tool in the fad driven management tool kit can be found at http://www.kfu.com/nsayer/compat.html. Phrenologists welcome at this biorhythmic compatibility page. Insert two birthdates and a scientifically dubious match percentage is produced. You know how we like numbers (even if they have no meaning)! For those of us with only a Masters degree in Science, of course, try http://www.ducksbreath.com/.

Pinball Wizard

Slip in your quarters, pull that hammer back and let it fly! Give me your best shot, news or views and let's get your name up in **bold lights**! Contact *Practice Network* by hitting **Tom Baker's** bumper at (614) 337-9073 or Email to VTCJ69A@prodigy.com.

Endnotes

1. ..when he exclaimed, "I'm mad as hell and can't take it anymore!!" in the film Network.

2. George, J.M. (1996). Trait and State Affect. In K.R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 145-171). San Francisco, Jossey-Bass Publishers.

3. Brief, A.P., Butcher, A.H. & Roberson, L. (1995). Cookies, disposition, and job attitudes: The effects of positive mood inducing events and negative affectivity on job satisfaction in a field experiment. *Organizational Behavior and Human Decision Processes*, 62, 55-62.

4. Sutton, J.I. & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. *Academy of Management Journal*, 31, 461-487.

5. Hochschild, A.R. (1983). *The managed heart:: Commercialization of human feeling*. Berkeley, CA: University of California Press.

6. Ekman, P. (1984). Expression and the nature of emotion. In K.R. Scherer & P. Ekman (Eds.) *Approaches to emotion*. 319-343. Hillsdale, NJ: Erlbaum.

7. Ekman, P., Friesen, W.V. & Ancoli, S. (1980). Facial signs of emotional experience. *Journal of Personality and Social Psychology, 39*, 1125-1134.

8. Fordyce, WE. (1996). Response to Thompson/Merskey/Teasell, *Pain, 65*, 113.

9. Bigos, S.J., Battie, M.C., Spengler, D.M., Fisher, L.D., Fordyce, W.E., Hansson, T., Nachemson, A.L. & Zeh, J. (1992). A longitudinal prospective study of industrial back injury reporting. *Clinical Orthopedics, 279*, 21-34.

10. Fordyce, W. E. (Ed). *Back pain in the workplace: Management of disability in nonspecific conditions*. (1995). A report of the Task Force on Pain in the Workplace of the International Association for the Study of Pain Seattle, IASP Press, p. 15.

11. Engel, C.E., von Korff, M. & Katon, W.J. (1996). Back pain in primary care: Predictors of high health care costs. *Pain, 65*, 197-204.

12. Title and theme of this piece was borrowed from Keith's spring talk at a PTC meeting in Northern California

own skills or those of a consultant you have hired. Get your copy from: Eubanks, J., O'Driscoll, M., Hayward, G., Daniels, J., and Connor, S. (1990). Behavioral competency requirements for organization development consultants. *Journal of Organizational Behavior Management. 11*, 77-97.

The second tool was presented at this Spring's conference. It was developed by Mike Kaminsky and Mike McDaniel (U. of Akron) and helps you sort out whether you lean toward academia or applied work. It was developed in part with a tip of the hat to Holland's RAISEC taxonomy (Academics go Investigative, Applied folks lean Enterprising). If you are struggling with this fundamental question—industry or academia—this 23-item self administered and scored tool may help. Get a copy via Mike McDaniel at (330) 972-8371 or Email to mmcdaniel@uakron.edu.

More on Immunity for Employers During Reference Checking

IMHO, this is the hottest legal issue out there! Immunity from liability for employers providing references in good faith to other employers is already law in several states (Alaska, Arizona, California, Delaware, Florida, Georgia, Idaho, Indiana, Kansas, Louisiana, Maine, New Mexico, Ohio, Oregon, South Carolina, South Dakota, Utah, Wisconsin and Wyoming) and under consideration in many more (Alabama, Hawaii, Iowa, Louisiana, Michigan, Minnesota, Nebraska, Pennsylvania and Tennessee). Think of this as opening up the predictor space, if you start to get reliable *former* job reference information.

Now Virginia is looking to add a new twist. Virginia bill HB 1458, introduced 1/22/96, in addition to *providing* immunity for the employers providing references, is seeking to provide immunity to prospective employers from causes of action relating to the hiring of the applicant, such as negligent hiring or negligent retention. In other words, you get protection to *use* the information too. This is a critical loophole that needs to be plugged up and VA is looking to do just that.

As always, thanks to long-time *Practice Network* contributor **David Arnold** (Reid Psychological Systems and ATP) and his new associate, **Frankie Kohout** for keeping us up-to-date.

Staying in Touch

Practice Network has been toying around with new (web) and old (phone) technologies lately. (800) 972-3524 is the 800 number for the U.S. Capitol. Also try http://www.access.gpo.gov/su_docs to get web access to many governmental records, including online Congressional Records back to 1/94. The USDOL has chipped in http://www.saic.com/fed/uscompanies/labor which purports to be a best practices clearinghouse.

The Student Network

Bryan C. Hayes
Old Dominion University
Greg E. Loviscky
The Pennsylvania State University

The Student Network serves as a forum for the expression and exploration of concerns and interests of students pursuing careers in industrial/organizational psychology. This is accomplished by means of student contributions. More specifically, students generate ideas for the column and then work with a network of student representatives to craft the articles that appear in each issue. While we have already solicited ideas from student representatives, ideas for future columns are always welcomed and encouraged. If you have a concrete idea for a column, and are interested in sharing experiences or knowledge that would be of interest and helpful to other students, contact your student representative. We will introduce students with similar ideas so that they may collaborate. Currently, there are representatives in approximately 60 schools with graduate programs in I/O psychology. If your program does not currently have a student representative for *The Student Network*, please contact us regarding ideas for the column and/or to arrange the identification of a representative. Of course, current student representatives may also send us new ideas for columns. We can be reached via "snail mail" at TIP Student Network, attention: Greg Loviscky, 429 Moore Building, Pennsylvania State University, University Park, PA, 16802, or via e-mail at BCH100G@ODUVM.CC.ODU.EDU.

One idea that has been expressed by several students is the need for an electronic bulletin board for use by students of I/O psychology. The bulletin board would serve several functions. Students could post questions and problems that are unique to us and receive input and recommendations from other students. Another possible function of the bulletin would be to use it as a place for students to meet and collaborate on areas of interest and research ideas. If you would be interested in becoming involved with the creation and maintenance of an electronic bulletin board, please contact us via the previously mentioned e-mail address.

This edition of *The Student Network* contains two articles. In the first article, Frederick Morgeson provides an opportunity for students to get involved with issues related to I/O psychology. In the second article, Dr. Debra Major previews the potential changes to *SIOP's Guidelines for Education and Training at the Doctoral Level.* We offer special thanks to her and the other sub-committee members for their diligence and thorough review of the graduate training process.

An Introduction to the APA Science Student Council (APASSC)

Frederick P. Morgeson
Purdue University

As the current chair and Industrial/Organizational representative to the APASSC, I would like to give an overview of who the Council is, what we do, and why we seek your input and involvement. The APASSC was formed in 1993 in order to gain scientifically oriented graduate student input into APA's Science Directorate. The Council consists of nine members from diverse areas of psychology who serve in an advisory capacity to the Science Directorate. We have been involved in a number of different activities, such as working with the American Psychological Association of Graduate Students (APAGS) on various initiatives, organizing symposia of interest to science-oriented students for the Annual APA Convention, and reviewing Science Directorate programs.

Our mission is to represent the interests of scientifically oriented students, gain their increased participation in APA, and serve as their voice within the Science Directorate. We have attempted to accomplish these goals in a number of ways. For example, last winter we developed a special science issue of the APAGS newsletter. In it we provided a number of articles focusing on life after the Ph.D., current research advances, funding opportunities, and ways in which the APA can benefit scientifically oriented graduate students. These themes are continued in the science section that becomes a regular feature of the APAGS newsletter.

The success of these initiatives, however, depends on gaining your input and participation. To do this, we need to hear from you concerning the ways in which the APASSC can better serve the science student population. If you have any specific ideas or wish to find out more about the council, please contact Ms. Marybeth Hanley at the APA Science Directorate, 750 First Street NE, Washington DC 20002-4242, by e-mail at mbh.apa@email.apa.org, by FAX at 202-336-5953, or by telephone at 202-336-6000. You can also send me e-mail at morgeson@ psych.purdue.edu. I look forward to hearing from you.

Doctoral Education in I/O Psychology: A "Sneak Peek" at the Revised Guidelines

Debra A. Major
Old Dominion University

Working on the revision of *SIOP's Guidelines for Education and Training at the Doctoral Level* over the past year has been a real education. The updated version my subcommittee (Jeffrey Reed, Kecia Thomas, Kathleen Lundquist, and Lisa Scherer) produced is still a few steps away from final approval. Nonetheless, I'd like to give you a "sneak peek" at what you can expect to see in the revised guidelines and more generally share what I learned throughout the process.

Almost immediately, it became clear that the I/O community, particularly practitioners, were dissatisfied with the apparent theoretical focus of the *1985 Guidelines*. Although the importance of practice was not intentionally neglected in earlier versions, the revised *Guidelines* explicitly acknowledge the equal importance of theory and practice in doctoral education. The *Guidelines* recommend that learning about a content area at the theoretical and conceptual levels be complemented by learning the applied "how to" skills associated with the content area.

The revised *Guidelines* also attempt to be more explicit about who is responsible for graduate training and education. To put it simply, we all are. Although university faculty may be most obviously accountable, practitioners and students themselves also have responsibilities. I/O practitioners working in the field can contribute to doctoral education by offering internship and research opportunities and by sharing their own practical experiences to help ensure that equal weight is given to science and practice.

It is also critical that students take an active role in their own education. The revised *Guidelines* should be useful to doctoral candidates by providing a preview of doctoral training and supplying an overview of the competencies students are responsible for mastering during the course of their education. The revised *Guidelines* encourage students to be proactive in their pursuit of doctoral education. This can mean taking advantage of presented opportunities (e.g., taking a needed class, participating in a research project, attending conferences). It may also mean developing one's own opportunities (e.g., requesting an independent study, finding an internship, developing a professional network, reading appropriate journals).

Students also need to be aware of the critical importance of an area the new *Guidelines* label "Business/Consulting Skills." This content area consists of an array of practical communication, analytical, and interpersonal relations skills, including writing, presenting, marketing, problem solving, and working in teams. Though these skills have always been essential to I/O psychologists, they appear as a formal competency for the first time in the revised *Guidelines*. In previous versions of the guidelines, these skills were suggested selection criteria in screening applicants for graduate study. However, after numerous discussions with students and professionals in academia and the field, we felt that a vast majority of graduate school candidates who would be viable in other ways would be likely to lack such skills. We were also concerned by the fact that most of those questioned in the course of preparing the revised *Guidelines* indicated that many Ph.D.s currently graduate without adequate "Business/Consulting Skills." Finally, we felt that such skills were equally important across career paths.

In gathering input for the revised *Guidelines*, it was suggested that practitioners and academicians may require different sets of competencies. Although the committee seriously considered the idea, several experiences convinced us that this was not the case. We took part in several panel discussions and roundtable sessions dealing with graduate education at the 1996 SIOP conference in San Diego. I was most directly involved with a roundtable I co-facilitated with Jerry Kehoe and Vicki Vandaveer, both practitioners. During the roundtable, those in attendance (a cross-section of students, practitioners, and academicians) generated a list of the essential KSAs for an I/O psychologist seeking an applied career. That list included: content knowledge, conceptual/critical thinking, communication skills, initiative, ability to achieve closure, social intelligence, flexibility, willingness and ability to learn, respect for other perspectives and disciplines, curiosity, and a good work ethic. Ultimately, roundtable participants agreed that these skills would be important to an I/O psychologist pursuing any career path.

The revised *Guidelines* take the same position. The competencies described in the new version are considered important to professional development as an I/O psychologist, regardless of career track. However, the *Guidelines* only include competencies that apply in some unique way to I/O psychologists. Although they are certainly important, competencies that make you a good professional in any discipline, like those mentioned above, are not part of the Guidelines.

I encourage you to familiarize yourself with the revised *Guidelines* when they become available. Discuss them with your peers, faculty, and professional contacts. Use them to help design a plan for your own professional development and as a "yardstick" of your progress. Remember that the whole field is concerned about the adequacy of your education, but nobody can ensure it better than you!

Call for Fellowship Nominations

Elaine D. Pulakos

Each year, the Fellowship Committee requests and evaluates nominations of society members who have made unusual and outstanding contributions to psychology for the status of Fellow. The Fellowship Committee strongly encourages nominations of individuals from all areas of endeavor within our profession.

We particularly encourage nominations from candidates who have made their contribution through the practice and application of psychology, a group that is often under-represented in the nomination process. There are many I/O Psychologists who have contributed substantially to the field by applying psychology in organizations, and helping others apply our science in real-world settings. We encourage nominations of individuals who have accomplished this important goal.

Detailed information on criteria considered by the Fellowship Committee is published in *TIP*, April 1994, pp. 31–34. General criteria are summarized below.

Criteria

* Society Member for no less than 2 years at the time of election
* At least three letters of recommendation from Fellows of the Society
* An unusual and outstanding contribution to the field. This contribution can be achieved through research, practice, teaching, administration, or any combination of these. The distinguishing characteristic of Fellows is that they have made a contribution that goes beyond the norm of consistent and competent research, practice, teaching, etc.., and that their efforts have helped advance our field.

Nomination

* By either Society Fellow or Member

Due Date

* December 1, 1996

Request Nomination Materials From and Direct Questions To:

Elaine D. Pulakos, Chair, SIOP Fellowship Committee
Personnel Decisions Research Institutes, Inc–Washington, DC
1530 Wilson Boulevard, Suite 170
Arlington, VA 22209
(703) 522 -7885

SIOP Customer Survey Results: III

Jeffery S. Schippmann
CEWC Member/Personnel Decisions International

Richard A. McLellan
Personnel Decisions International

Sally Hartmann
CEWC Chair/Sears, Roebuck & Co.

In its continuing effort to provide the most relevant and useful annual workshops, the SIOP Continuing Education and Workshop Committee (CEWC) conducted a survey of SIOP members and workshop participants in March of 1996. The survey was designed to measure the continuing education needs and interests of SIOP members.

This was the third survey of its kind in as many years. The first survey was conducted in 1994 to help plan the workshop offerings at the 1995 conference in Orlando (Schippmann, Higgs & Matthews, 1995). The second survey, administered early in 1995, guided the development of the workshop program presented this past May in San Diego (Schippmann & Hartmann, 1995). The results of the third survey, reported here, provided input into the workshop program being assembled for the 1997 annual conference in St. Louis.

This article lays out the basic survey results in a fashion similar to the two previous reports. However, with data from three consecutive years now in hand, it is possible to start looking across time to see if the needs and interests of the SIOP membership are changing.

The Customer Survey Questionnaire

The general structure of the customer survey questionnaire has remained unchanged over the past couple of years. Schippmann, Higgs, and Matthews (1995) describe the original development of the structure and content of the questionnaire, and we will not repeat that description here. In brief, the survey has four sections:

1. General content functions (industrial, organizational, methodological, human resource management, and other);
2. Specific content functions (37 specific work activity areas of I/O Psychology; e.g., job analysis);
3. Specific workshop topics (37 specific suggested workshop topics corresponding to the 37 specific content areas); and
4. Work setting and previous workshop participation information.

With respect to the first three sections of the survey, respondents were asked to indicate their degree of interest in the function or topic using a five-point rating scale (1 = *Not Interested* to 5 = *Extremely Interested*). Sections one, two, and four have remained unchanged across the 3 years in which this survey has been conducted. The third section has had unique content in each year but has always had one possible workshop topic representing each of the 37 work areas of I/O psychologists (e.g., job analysis, training and development).

Subjects

Surveys were sent to everyone who registered for a 1996 workshop (n = 410) and to a random sample of the SIOP general membership (excluding individuals who had already signed up for a workshop (n = 505). The number of usable questionnaires returned to us for analysis are presented below, broken down by sample group. The response rates in 1996 were very similar to those of the two previous surveys with regard to the relative proportions of respondents from various employment settings. The demographic makeup of the respondents has also been very consistent from year to year.

Results and Discussion

The most general assessment of interests is drawn from section one of the survey, which gathered ratings for five general content areas. The mean interest ratings (and rank position in parentheses) are presented in Table 2 (broken down by respondent group) and Table 3 (broken down by employment setting). The patterns of interest represented across the breakout cells are very consistent with the results of the previous two surveys.

Tables 4 and 5 present the results for section two of the survey, which focuses on the importance ratings for 37 specific work activity areas. Again, the tables present mean ratings, with rank order based on the means presented in parentheses. Table 4 shows the results broken down by workshop participants versus general membership, and Table 5 gives the results by area of employment. In using these data to aid in the planning of workshops, the CEWC focuses a good deal of attention on how the specific workshop topic ratings (section three) compare to the ratings of their corresponding content areas in section two, with large gaps indicating the need to search for alternative specific topics. As in previous reports, we have chosen not to report the results for the specific topics here.

Table 4 also presents the specific content area results for the entire sample. In general, the top-ranked items from the 1996 survey are the same ones that have been highly rated in previous years. The top five for 1996 include Selection/Testing Tools and Approaches, Organizational Change, Impact/Payoff of HR Practices, Selection/Validation Issues, and Workgroups/Teams. The differences in the interests of workshop participants and

TABLE 1: Sampling Plan and Survey Return Rate

Sample Group	Surveys Out	Surveys Returned	College or Univ.	Nonprofit	Public Sector Business	Priv. Sector Business	Consulting	Other/ Nonspecified
Workshop Participants	410	110 (27%)	14 (13%)	3 (3%)	13 (12%)	46 (42%)	33 (30%)	1 (1%)
General Membership	505	101 (20%)	33 (33%)	5 (5%)	6 (6%)	25 (25%)	28 (28%)	4 (4%)
TOTAL	915	211 (23%)	47 (22%)	8 (4%)	19 (9%)	71 (34%)	61 (29%)	5 (2%)

TABLE 2: SIOP 1996 Customer Survey Results Overall and By Respondent Group

GENERAL CONTENT AREAS	Overall n = 211	Workshop Participants n = 110	General Member-ship, n = 101
Industrial	4.02 (2)	4.26 (1)	3.77 (2)
Organizational	4.18 (1)	4.17 (2)	4.18 (1)
Methodological	3.26 (5)	3.19 (5)	3.34 (4)
Human Resource Management	3.75 (3)	3.95 (3)	3.54 (3)
Other (e.g., consulting practice issues, teaching I/O, ethics)	3.30 (4)	3.36 (4)	3.24 (5)

Key: 1) Rating data based on judgments using the following scale: 1 = No interest; 2 = A slight amount of interest; 3 = Moderately interested; 4 = A good bit of interest; 5 = Extremely interested.
2) Numbers in parentheses are rankings (broken down by respondent group and by section in the questionnaire).

TABLE 3: SIOP 1996 Customer Survey Results Breakdown By Area of Employment

GENERAL CONTENT AREAS	University 4-Year College n = 47	Nonprofit n = 8	Public Sector Business n = 19	Private Sector Business n = 71	Consulting n = 61
Industrial	3.96 (2)	3.88 (2)	4.37 (1)	4.07 (2)	3.92 (2)
Organizational	4.24 (1)	3.75 (3)	3.89 (2)	4.29 (1)	4.19 (1)
Methodological	3.70 (4)	4.00 (1)	3.42 (4)	3.14 (4)	2.93 (5)
Human Resource Management	3.87 (3)	2.75 (5)	3.68 (3)	4.00 (3)	3.55 (3)
Other (e.g., consulting practice issues, teaching I/O, ethics)	3.50 (5)	3.00 (4)	2.88 (5)	3.05 (5)	3.53 (4)

Key: 1) Rating data based on judgments using the following scale: 1 = No interest; 2 = A slight amount of interest; 3 = Moderately interested; 4 = A good bit of interest; 5 = Extremely interested.
2) Numbers in parentheses are rankings (broken down by respondent group and by section in the questionnaire).

TABLE 4: Results of Customer Survey Broken Down by Respondent Group

SPECIFIC CONTENT AREAS	Overall n=211		Workshop Participants n=110		General Membership n=101	
Industrial						
1. Legal Issues	3.56	(10)	3.74	(7)	3.37	(17)
2. Job Analysis	2.95	(30)	3.24	(23)	2.64	(35)
3. Job Design	2.93	(31)	3.07	(27)	2.78	(31)
4. Performance Appraisal	3.47	(14)	3.53	(12)	3.40	(15)
5. Job Performance/The Criterion	3.65	(8)	3.77	(5)	3.52	(8)
6. Selection/Testing Tools and Approaches	3.97	(1)	4.15	(1)	3.77	(3)
7. Selection/Validation Issues	3.71	(4)	3.93	(3)	3.46	(11)
8. Test Construction	3.25	(20)	3.42	(16)	3.06	(26)
Organizational						
9. Culture/Climate	3.53	(12)	3.52	(13)	3.54	(7)
10. Decision Making	3.15	(24)	3.06	(28)	3.25	(20)
11. Intergroup/Communications (conflict negotiation)	3.16	(23)	2.98	(31)	3.35	(18)
12. Attitude Measurement	3.45	(15)	3.46	(14)	3.43	(12)
13. Leadership	3.69	(6)	3.62	(10)	3.78	(2)
14. Motivation	3.52	(13)	3.40	(17)	3.65	(5)
15. Organizational Change	3.87	(2)	3.91	(4)	3.84	(1)
16. Training/Development	3.32	(18)	3.28	(21)	3.37	(16)
17. Work Groups/Teams	3.70	(5)	3.70	(9)	3.69	(4)
Methodological						
18. Applied Research Methodology	3.53	(11)	3.55	(11)	3.52	(9)
19. Qualitative Research Methods	3.10	(26)	3.13	(26)	3.07	(25)
20. Statistical Techniques	3.05	(27)	3.02	(29)	3.09	(24)
Human Resource Management						
21. Absenteeism/Turnover	2.86	(33)	2.94	(32)	2.77	(32)
22. Current Topics/Issues (e.g., I/O and work and family issues)	3.18	(22)	3.20	(24)	3.17	(21)
23. Downsizing/Outplacement Issues	3.35	(16)	3.29	(20)	3.41	(14)
24. Employee Surveys	3.61	(9)	3.73	(8)	3.47	(10)
25. Gender/Ethnic/Diversity Issues	2.87	(32)	2.88	(33)	2.86	(29)
26. Impact/Payoff of HR Practices	3.71	(3)	3.98	(2)	3.42	(13)
27. International I/O / HR Management	3.15	(25)	3.30	(19)	2.98	(28)
28. Reward Systems & Compensation	3.21	(21)	3.27	(22)	3.15	(22)
29. Stress in the Work Place	2.82	(34)	2.82	(34)	2.81	(30)
30. Succession Planning & Career Management	3.28	(19)	3.43	(15)	3.12	(23)
31. Total Quality Initiatives	2.65	(36)	2.75	(35)	2.55	(36)
32. Work and Family Issues	2.70	(35)	2.66	(36)	2.73	(34)

TABLE 5: Results of Customer Survey Broken Down By Area of Employment

SPECIFIC CONTENT AREAS	University 4-Year College n = 47	Nonprofit n = 8	Public Sector Business n = 19	Private Sector Business n = 71	Consulting n = 61
Industrial					
1. Legal Issues	3.46 (19)	3.88 (7)	3.53 (13)	3.56 (11)	3.66 (8)
2. Job Analysis	2.65 (37)	3.13 (17)	3.37 (19)	2.94 (29)	2.98 (28)
3. Job Design	2.87 (34)	2.88 (24)	3.26 (20)	2.84 (31)	3.00 (27)
4. Performance Appraisal	3.40 (22)	3.00 (20)	4.00 (3)	3.43 (15)	3.44 (17)
5. Job Performance/The Criterion	3.47 (17)	4.13 (4)	4.37 (1)	3.60 (9)	3.62 (9)
6. Selection/Testing Tools and Approaches	3.89 (2)	4.25 (2)	4.05 (2)	3.80 (4)	4.19 (1)
7. Selection/Validation Issues	3.63 (9)	4.13 (4)	3.89 (5)	3.57 (10)	3.78 (4)
8. Test Construction	3.24 (26)	3.50 (10)	3.47 (16)	3.23 (20)	3.12 (25)
Organizational					
9. Culture/Climate	3.66 (6)	2.88 (24)	3.37 (19)	3.64 (6)	3.53 (13)
10. Decision Making	3.18 (28)	3.00 (20)	3.58 (10)	3.03 (27)	3.17 (21)
11. Intergroup/Communica-tions (conflict negotiation)	3.16 (29)	2.50 (32)	2.95 (28)	3.09 (25)	3.47 (15)
12. Attitude Measurement	3.49 (15)	2.63 (29)	3.47 (16)	3.54 (12)	3.45 (16)
13. Leadership	3.69 (5)	2.88 (24)	3.89 (5)	3.69 (5)	3.77 (5)
14. Motivation	3.64 (8)	2.88 (24)	3.74 (7)	3.38 (16)	3.55 (12)
15. Organizational Change	3.57 (10)	3.13 (17)	3.84 (6)	4.14 (1)	3.97 (2)
16. Training/Development	3.77 (3)	3.25 (14)	3.47 (16)	3.23 (20)	3.10 (26)
17. Work Groups/Teams	3.93 (1)	3.38 (12)	3.53 (13)	3.61 (7)	3.73 (7)
Methodological					
18. Applied Research Methodology	3.74 (4)	4.50 (1)	3.58 (10)	3.43 (15)	3.34 (19)
19. Qualitative Research Methods	3.46 (19)	3.63 (8)	3.05 (26)	3.09 (24)	2.85 (31)
20. Statistical Techniques	3.50 (14)	4.00 (6)	3.11 (24)	2.94 (29)	2.73 (32)
Human Resource Management					
21. Absenteeism/Turnover	2.87 (34)	2.63 (29)	2.79 (32)	2.94 (29)	2.87 (29)
22. Current Topics/Issues (e.g., I/O and work/family issues)	3.52 (13)	2.88 (24)	3.05 (26)	3.14 (23)	3.12 (25)
23. Downsizing/Outplace-ment Issues	3.54 (12)	2.13 (35)	3.21 (21)	3.37 (17)	3.42 (18)
24. Employee Surveys	3.57 (11)	3.13 (17)	3.58 (10)	3.83 (3)	3.48 (14)

Other			
33. Consulting Practices/Issues	3.34 (17)	3.40 (18)	3.27 (19)
34. Ethics	3.01 (28)	2.99 (30)	3.03 (27)
35. I/O Career Development	2.96 (29)	3.13 (25)	2.76 (33)
36. I/O Issues for Academicians	2.02 (37)	1.86 (37)	2.21 (37)
37. New Technology/Tools	3.67 (7)	3.77 (6)	3.57 (6)

Variable

Figure 1
Specific Content Area Mean Ratings Across Three Years

Legend: 1994, 1995, 1996

Sections: Industrial | Organizational | Meth. | Human Resource Mgmt. | Other

	1994	1995	1996		
25. Gender/Ethnic/Diversity Issues	3.15 (30)	2.63 (29)	3.11 (24)	2.79 (32)	2.70 (33)
26. Impact/Payoff of HR Practices	3.44 (20)	3.25 (14)	3.67 (8)	4.10 (2)	3.61 (10)
27. International I/O / HR Management	3.18 (28)	3.13 (17)	2.95 (28)	3.21 (22)	3.17 (22)
28. Reward Systems & Compensation	3.48 (16)	2.75 (27)	2.95 (28)	3.25 (18)	3.15 (23)
29. Stress in the Work Place	3.07 (31)	2.25 (34)	2.68 (35)	2.71 (33)	2.86 (30)
30. Succession Planning/Career Management	2.82 (35)	2.50 (32)	3.16 (22)	3.51 (13)	3.58 (11)
31. Total Quality Initiatives	2.76 (36)	2.00 (36)	2.79 (32)	2.59 (35)	2.69 (34)
32. Work and Family Issues	3.36 (23)	2.38 (33)	2.47 (36)	2.52 (36)	2.56 (36)
Other					
33. Consulting Practices/Issues	3.24 (26)	3.50 (10)	2.79 (32)	3.06 (26)	3.80 (3)
34. Ethics	3.30 (24)	3.38 (12)	2.74 (34)	2.60 (34)	3.20 (20)
35. I/O Career Development	2.91 (32)	2.88 (24)	2.84 (30)	3.21 (22)	2.66 (35)
36. I/O Issues for Academicians	3.40 (22)	1.50 (37)	1.58 (37)	1.55 (37)	1.60 (37)
37. New Technology/Tools	3.64 (7)	4.13 (4)	3.53 (13)	3.61 (8)	3.74 (9)

Work in the 21st Century: Implications for Compensation

Karen E. May
Human Resource Solutions

The lack of response to my request in the last issue for information about the changing nature of work and compensation leads me to wonder if this is an area in which I/O psychologists are working. Let me begin this article with some comments about why I think we can contribute significantly to today's compensation challenges.

First, at a fundamental level, people in organizations receive pay according to their "value." Value is determined by any number of factors including work performed, tenure, capabilities, cost of outsourcing similar services, or a combination of these as well as many others. When compensation is based on work performed, the compensation system often requires a job description—the more detailed, the better—which implies a need for a method for analyzing and describing work activities. Although many companies are moving away from tying compensation to specific jobs, individual jobs still need to be described so that meaningful sets of jobs (e.g., job families) can be created and compared both within and across organizations. I/O psychologists' expertise in analyzing jobs and determining skill requirements helps to form the core of job-based compensation.

Second, although the value of pay as a motivator has been questioned, much of the current work in compensation is focused on creating compensation programs that incent specific employee behavior that is valued by the organization. The design of these systems, which are often linked to individual or team performance on the job, requires careful measurement of behaviors, results, or outcomes associated with employee effort. When incentive compensation programs require accurate performance measurement, I/O psychologists' expertise is clearly desired.

Moreover, for incentive compensation programs that base rewards on organizational outcomes such as marketshare and return on assets, I/O psychologists can help to establish the linkages between job activities/work behavior and organizational results. I/O psychologists can clearly delineate the path for employees to follow in order to achieve higher-order outcomes. Without these linkages, individual effort and work behavior do not connect with organizational outcomes in the minds of employees, thus neutralizing the program's incentive value. In addition, compensation programs have "incentive power" to the extent realistic performance targets are set. A rule of thumb some program designers use to establish the lowest reward target is at the point where employees have an 80% chance of reaching the target given their job responsibilities, workload, and resources. I/O psychologists can serve a critical role by helping designers to find that point.

---

the general membership appear to be most pronounced among the specific content areas that compose the Organizational general content area.

The results in Table 5 can be looked at from a number of angles, but essentially they show in some detail how the interests and educational needs of I/O psychologists from various employment settings differ. In focusing on the most or least highly ranked content areas for the whole sample, one tends to find the areas where the perspectives agree. For example, the top ranking item overall (Selection/Testing Tools) is ranked no lower than fourth by any employment area. Similarly, I/O Issues for Academicians got its highest ranking from those in university/college employment settings, but even there it ranked 22nd out of 37. The biggest differences appeared in content areas that populated the "middle of the pack." Examples of this are Training/Development, Motivation, and Culture/Climate.

Having conducted this survey for 3 consecutive years, we wanted to take a look at the data to identify any possible changes over time that might reflect general shifts of emphasis in the field. While the data in each year have shown differences in interests by employment setting, the differences have largely replicated. The demographic makeup of the three samples has been very similar as well, so we felt reasonably comfortable that any longitudinal increases or decreases we might find for the specific content areas would not be the result of variability in the composition of the samples. We prepared a data file with the mean ratings for the 37 specific content areas for each of the three years of the survey, and then identified content areas where the mean had increased or decreased throughout each of the three years, and those for which there had been a sharp increase or decrease between two years that was at least maintained in the 1996 data.

Figure 1 shows these data in graphical form. What we found was, aside from increased interest in Selection/Testing Tools (item 6) and Legal Issues (item 1), most of the changes were among the items that make up the Human Resources Management general content area. For example, while interest in Absenteeism/Turnover is generally low, it has been steadily increasing. Notable decreases have occurred for Total Quality Initiatives (item 31), Work and Family Issues (item 32), Gender/Ethnic/Diversity Issues (item 25) and Stress in the Workplace (item 29).

In summary, the CEWC has found their data useful for guiding workshop offerings. Our hope in presenting them here is that others will find them useful for planning purposes as well. Anyone interested in additional breakouts or displays of these data should feel free to call either Jeff, Rich, or Sally.

References

Schippmann, J. S., Higgs, C., & Matthews, L. D. (1995). SIOP market needs analysis *The Industrial-Organizational Psychologist, 32*, 59-63.
Schippmann, J. S. & Hartmann, S. (1995). SIOP Customer survey results: II. *The Industrial-Organizational Psychologist, 33*, 37-42.

Many companies are changing their compensation practices in response to changes in jobs, organization structure, and compensation philosophy. Moreover, companies are making changes in order to link compensation more closely to business strategy and outcomes. Some job and work trends that have significant implications for compensation are: (a) the lack of clearly defined and stable jobs and (b) the flattening of organizations. Each of these trends requires new approaches to compensation. I will discuss each of these trends and then describe some of the compensation strategies that are being used in response.

Lack of clearly defined and stable jobs. As organizations become leaner, they often rely on fewer employees to accomplish more work. In addition, in an effort to increase competitiveness, tasks assigned to employees may shift frequently as business opportunity shifts, resulting in more fluid and less stable jobs. Task-based job descriptions become outdated quickly, rendering job descriptions a poor management tool. "Role descriptions" often take their place, defining a job in terms of a role in a work process or responsibility for a specific outcome. Role descriptions tend to be more resilient to changes in specific tasks performed, thus providing valuable information about work performed without the problem of repeated obsolescence. This approach to defining jobs also allows for a great deal of variance in specific tasks performed across people holding the same job title and can tolerate changes in work performed over time.

Traditional compensation systems depend on narrowly defined and stable jobs to set clear and easily distinguished salary structures. However, traditional systems aren't equipped to handle loosely defined jobs that change focus frequently nor role descriptions that may not have counterparts in similar organizations. Consequently, organizations are looking for streamlined and effective ways to compensate their employees without being tied to highly detailed job descriptions, and these approaches include skill-based pay and broadbanding.

Skill-based pay. Employers who want to increase organizational readiness and assignment flexibility cultivate a workforce in which employees learn and build skills continuously so that employees can be effective when assigned new tasks with a short learning curve. These employers compensate their employees for the skills they possess or acquire, rather than for the jobs they fill. The design of these programs requires identifying which skills the organization needs now and in the future, and then communicating to employees the value placed on possession of those skills. Some skill-based programs reward employees based on the number of skills they possess, others on achievement of skill proficiency, or both. Under a skill-based pay program, an employee could increase his or her pay through the acquisition of additional skills valued by the company without a change in work activities. In this case, the message to the employee is, "We want you

to be ready for the work we think is coming in the future, and we'll pay you for the readiness, even if you're not using the skills now."

In order for the skill-based pay systems to work and maintain their integrity, the processes for identifying relevant skills and skill measurement must be sound. I/O psychologists contribute expertise to both of these areas. Identification of skill requirements associated with current and future work is part of most job analysis procedures today. As we shift our focus towards work versus job analysis (May, 1996), we change the unit of analysis from the job to work activities and then apply techniques for identifying requisite skills. Skill measurement is a cornerstone of our field, and whether an organization is conducting assessments, eliciting self-rating, or collecting multi-rater data, I/O psychologists can add to the integrity of a skill-based pay program by implementing sound data collection and inference techniques.

Broadbanding. Another approach to compensation that responds to changing job descriptions and that is becoming very popular is broadbanding. Although many definitions are used, broadbanding is generally recognized as a way to group similar jobs into a single broad band in which salary structures associated with each job are erased. That is, all jobs included within the band have the same salary range representing the lowest base pay of the lowest job to the highest base pay of the highest job. Broadbanding increases salary ranges for each job by including the job within a broader range of jobs which have a single salary structure, and decreases the number of job classifications by consolidating similar jobs into a single classification. For example, a company with 30 salary bands might consolidate the existing ranges into 10 broad salary bands. By doing so, employees can move between jobs within a band without changing titles and salary structures. Also, employees can receive increases in pay beyond the artificial ceilings set by rigid salary structures associated with specific jobs. By creating broader (and fewer) bands of jobs and consequently pay, managers have greater flexibility in making job assignments and more discretion in increasing compensation for individual employees because minor distinctions between jobs have been erased, promoting job movement and compensation flexibility. Job movement and compensation flexibility are key management tools for the next century.

Jobs can be banded for compensation or for career development purposes. In both cases, the creation of a band involves the measurement or assessment of the similarity of jobs given specific criteria (Caudron, 1993). Important distinctions need to be made between bands, and jobs contained within the same band must possess the same essential elements. I/O psychologists can offer their expertise in measurement and assessment for evaluating the similarities and differences between jobs and for creating logical job groupings.

Organizations becoming flatter. As a result of downsizing, reengineering, and restructuring, many organizations have become flatter by reducing the number of layers between the top and bottom of the organization. Pay increases as a function of advancement are increasingly becoming a rarity because there are fewer rungs to climb. In addition, each of the remaining layers has absorbed some of the work previously performed by others, resulting in both enlarged and enriched jobs for those who survived the change. Pay increases as a function of enlarged or enriched jobs are also unlikely. However, two compensation strategies that may be useful in supporting flat organizational structures are broadbanding and variable pay.

Broadbanding. As described above, broadbanding is a tool for managing employee careers and pay by consolidating jobs into job clusters or bands, thus decreasing dependency on highly detailed job descriptions and rigid salary structures. Broadbanding is a logical approach to compensation in a flat organization because it allows for continuous employee development and salary growth without formal title and pay grade changes. Broadbanding for the purpose of career development allows considerable lateral movement for employees, even across functions whenever the generic tasks and activities performed within a band are similar across functions. Pay increases can be associated with achievement of higher levels of proficiencies within a band or with an increased breadth of skills arising from cross-functional assignments.

With broadbanding, there is an appearance that employees can be moved around within the band without conformance to promotion or job transfer guidelines. By removing boundaries between jobs within a band, criteria for movement may seem irrelevant. However, having a broadband does not release managers from their responsibility for making promotion and transfer decisions fairly; in fact, it makes the guidelines more important because of the opportunity for bias and favoritism to influence decisions. With more discretion, managers need more guidance. Whether the guidance is provided by performance standards, behavioral criteria, or other observable demonstrations of skill and achievement, I/O psychologists can assist in the development of criteria and procedures for applying criteria to ensure that employee promotion and transfer decisions are made consistently and fairly.

Variable pay. The label "variable pay" can be applied to a wide variety of compensation programs including profit-sharing, bonuses based on individual, team, or company performance, and stock option grants. What these programs have in common is that some portion of an employee's compensation is "at risk," or dependent upon achievement of certain objectives; without achievement of pre-set objectives, pay can decrease or fail to accumulate beyond a basic level. Variable pay is traditionally used for sales employees in which sales revenue is tied to pay. A common element of executive compensation involves variable pay in which bonuses and

stock options are paid as a function of organizational success (e.g., earnings per share). Variable pay is quickly becoming a standard element for employees at lower organizational levels. For example, an employee might have a base salary of $40,000 with a potential upside of $6,000. The employee's ability to earn the full $46,000 available would be dependent upon individual, team, and/or company performance. Companies sometimes spread the at-risk pay across multiple factors; 50% based on company performance, 25% based on team or department performance, and 25% based on individual performance (Caudron, 1993).

The success of variable pay programs is dependent on identification of the specific activities and/or accomplishments that lead to overall business success, clear communication to employees regarding the desired outcomes which determine the variable component of their pay, and high integrity performance measurement. I/O psychologists can assist companies in all three areas to ensure the success of this form of compensation. Since variable pay can have a substantial financial downside and is often linked to subjective criteria, it behooves organizations to build as much structure and standardization into the measurement and delivery of variable compensation in order to reduce employee perceptions of unfairness, arbitrariness, and lack of validity.

Compensation can be a powerful vehicle through which to communicate organizational values and individual as well as group performance expectations. The choice and design of a compensation program needs to be carefully tied to company goals and objectives. I/O psychologists can play a key role in the success of these programs through the application of our knowledge and skills in work motivation, job and work analysis, skill assessment, and performance measurement.

I would be interested in hearing about the ways in which changes in jobs and organizations are influencing the work you do as an I/O psychologist. You can contact me at Human Resource Solutions, 61-F Avenida de Orinda, Orinda CA 94563, phone (510) 253-0458, fax (510) 253-9432, or e-mail HRS2000@ix.netcom.com.

References

Caudron, S. (1993). Master the compensation maze. *Personnel Journal, 72*(6), 64-75.
May, K. E. (1996). Work in the 21st century: Implications for job analysis. *The Industrial-Organizational Psychologist, 33*(4), 98-100.

Call for Program Proposals

1997 APA Convention in Chicago

Timothy A. Judge

It's already time to start developing program proposals for the 1997 APA Convention. The convention will be held in Chicago from Friday, August 15th, to Tuesday, August 19th. **Program proposals must be received (not postmarked) by December 2, 1996.**

The Board of Convention Affairs has established uniform requirements for all paper/poster proposals, which are detailed below. We welcome new and different program formats. We hope that having to write less encourages you to submit more! Papers, symposia, tutorials, panel discussions, and conversation hours are traditional, welcome formats, but we will also consider any innovative formats you can create.

APA is celebrating its Golden Anniversary at the 1997 convention. As Division 14 is one of the original divisions when APA was formed in 1946, the program committee welcomes proposals of any type that highlight the history of Division 14, historical accomplishments of the division, and contributions of I/O to psychology.

Specific details about program submissions appeared in the September issue of the *APA Monitor*. The Call for Programs is also available by writing: **Convention Office, American Psychological Association, 750 First Street NE, Washington, DC 20002-4242.** Please note that although the APA Call for Programs indicates that presenters at the convention must be APA members or be sponsored by APA members, APA has given SIOP permission to waive these requirements. Thus, **you must be a SIOP member or sponsored by a SIOP member to present at the APA convention as part of SIOP's program, but you do not need to be a member of APA or be sponsored by one.**

Note that APA distinguishes between "presentations" and "programs," with different submission procedures for each:

Presentations are individual papers to be presented either in a paper or poster session. Our presentations will be primarily poster sessions, however we also have the option of combining separately accepted papers into a paper session focusing on a common theme. Presentations (individual papers) will be blind reviewed. The new requirements for submission are: five copies of a 500 to 1,000 word summary and five copies of a 100-word abstract. Please do not put your name on the summary or abstract, just the submission title. Submissions should be double-spaced, with one-inch margins using elite type.

Programs refers to sessions with multiple presenters including traditional formats such as symposia, panel discussions, and debates. However, programs with creative, nontraditional formats are encouraged. Programs are not blind reviewed. It is important to know who the participants are in order to evaluate the proposal. Submit five copies of the complete proposal. Proposals for these sessions should include a 300-word general summary and 300-word summaries of each participant's presentation. As with presentations, submissions must be double-spaced, with one-inch margins, in elite type.

In evaluating submissions to the Convention, we will use the following criteria:

1. Appropriateness of the topic for SIOP
2. Technical adequacy (research methods, analyses)
3. Contribution to knowledge of the topic
4. Interest, informativeness, and innovation
5. For Programs: Do the multiple presentations form a coherent, integrated whole?

If you have questions, ideas, or suggestions for invited speakers, feel free to call, write, FAX or e-mail: Timothy A. Judge, Department of Management and Organizations, College of Business Administration, University of Iowa, Iowa City, Iowa 52242-1000. Telephone: (319) 335-3784; FAX: (319) 335-1956; E-mail: tim-judge@uiowa.edu. Please send all program submissions to this address as well, to be received (not postmarked) by December 2, 1996. As with many campus mail destinations, you should allow a week for receipt if using regular postal mail service.

The Program Committee looks forward to receiving your ideas and submissions. This is a great year to present at APA. We're counting on you to make the 1997 APA Convention a success.

If you are a member of the American Psychological Association (APA), please remember to assign **all 10** of your votes to Division 14 when you receive your Council Apportionment Ballot from APA.

APA Governance Initiatives

Dianne Brown, APA Science Directorate

Task Force on Test User Qualifications

APA is in the process of assembling a task force which will address the issue of test user qualifications, and hopefully lead to the formation of an APA policy. Existing APA policies, in the form of the test standards and the model licensing act, touch on the issue of test user qualifications but are insufficient to draw conclusions about user qualifications in specific applications of testing. APA's central office receives inquiries on this issue, reflecting the concerns of APA members, other test users, test developers and the public. Without clear policies on this issue, there is uncertainty regarding the guidance that may be offered by APA on the specific designation of what qualifies test users for a given instrument or class of instruments. The issue is of particular concern because it is clear that it will not be addressed in depth as part of the revised test standards (currently in progress). The APA Board of Directors and Council of Representatives have now approved the task force and the two co-chairs have been designated. From the Board of Scientific Affairs, Dr. Samuel Turner will co-chair the group and from the Board of Professional Affairs and the Committee for the Advancement of the Practice of Psychology, Dr. Stephen DeMers will co-chair. They have issued a call for nominations to several APA Boards and Committees and all APA Divisions. The task force will likely have its first meeting in October. SIOP's president (Jim Farr), Council representatives (Rich Klimoski, Irv Goldstein & Angelo DeNisi), and the rest of the executive committee have been closely monitoring the formation of the task force, as well as the larger issue of test user qualifications. SIOP members are concerned that any APA policy not be in conflict with standard professional practices in employment and industrial settings, as well as in research settings.

Task Force on Statistical Inference

In March, 1996, the Board of Scientific Affairs (BSA) endorsed the establishment of a Task Force on Statistical Inference. The purpose of the task force would be to elucidate some of the controversial issues surrounding applications of statistics including significance testing and its alternatives, alternative underlying models and data transformation, and newer methods made possible by powerful computers. The goal of the task force would be to state the controversies and to outline alternative approaches. The group is not intended to be prescriptive. BSA selected Robert Rosenthal, was appointed by the board and will present a proposal for the scope of the project to BSA at its November meeting. The working group also considered how the membership of the larger task force should be selected, in particular, to include representation of a wide range of views on statistical issues; outside funding opportunities; and a specific charge for the group, all of which will be reported back to BSA. Incorrect information about BSA's plans has been disseminated in various settings and this brief is intended to provide an accurate report of APA activities. BSA does not yet have a task force established and the Board is not proceeding on this issue from a particular perspective. APA envisions that the outcome of this initiative will clearly illuminate the issues that psychologists face in statistical practice and the reasons researchers hold different positions on these matters. The Board foresees a presentation of reasoned discourse on the pros and cons of different types of statistical usage.

Mandatory Retirement for Public Safety Officers?

Dianne L. Schneider
APA Science Directorate

"Can we tell simply by knowing someone's age whether that person will perform well or poorly on the job?"

This question was the crux of legislation considered by the U.S. Senate earlier this spring. HR 849, a bill that would allow exemptions to the Age Discrimination in Employment Act for public safety officers, was passed by the House in 1995 and referred to the Senate. Essentially, the legislation would allow state and local municipal agencies to set mandatory retirement ages and maximum hiring ages for public safety officers such as firefighters and police officers. Frank Landy testified before the Senate Labor and Human Resources Committee on March 8, opposing the bill.

In 1994, the House introduced a similar bill, citing concerns that public safety might be at risk if older workers suffered a debilitating condition, such as a stroke or heart attack, while on the job. Dr. Landy directed a Congressionally mandated study at Penn State University that resulted in a comprehensive description of the tasks performed by public safety officers, and the knowledge, skills and physical abilities needed to perform such tasks. In all, his team analyzed the results of over 5,000 research studies and collected data from over 500 cities, counties and states on the demands of public safety jobs, along with death rates and retirement policies. His research team concluded that age per se is a poor predictor of a worker's ability or the likelihood that he or she will experience a debilitating illness at the work site. Although the International Association of Chiefs of Police and the International Association of Fire Fighters support the proposed legislation, Dr. Landy questioned the scientific merit and social policy of basing retirement on chronological age instead of demonstrated ability to continue performing the job.

A compromise bill, termed the "exception to the exemption," would allow individuals targeted for retirement to demonstrate their fitness to continue performing essential job functions. Under this model, local jurisdictions could set a mandatory retirement age, but individual employees would be allowed to demonstrate that they could still perform their job successfully. Police and fire departments that are currently using tests for hiring decisions might easily use these same tests for assessing competency to remain on the job. Senator James Jeffords (R- VT) and his staff (particularly Reginald Jones, who recently moved to EEOC) worked with Dr. Landy to construct this exception to the exemption, and have tirelessly advocated to gain support for the compromise in the face of stiff opposition from the police and firefighter unions.

From Both Sides Now:
The Power of Teamwork–Fact or Fiction?

Allan H. Church

It seems like the notion of teams and teamwork is everywhere in organizations these days. You've got your change management teams, your project teams, your creative teams, your cross-functional teams, and your reengineering teams. Just try asking your friend or co-worker about the changes that are occurring in his/her organization the next time you're sitting around schmoozing over your favorite lager, and see if some recent initiative related to enhancing teamwork doesn't enter into the discussion. These bastions of collective cohesion are inescapable in the modern organizational system. Between continued pressures to reduce staff, do more with less, increase employee involvement, empower employees to better serve their customers, and continually improve one's processes, it is no wonder that leaders, managers and practitioners have turned to teams and teamwork as the "next wave" of organizing work (e.g., Cohen, 1993). In the last few years alone, for example, I've seen teamwork listed as a corporate value, a strategic objective, a criteria for assessing senior leadership, a cultural norm in a corporate merger situation, a primary initiative in a delaying and reengineering project, and a dimension for multi-rater feedback in two large professional service firms. Moreover even when the initiation of new teams is not an issue, many practitioners, and particularly those in the field of OD, focus their consulting efforts on making existing work groups and teams more effective through either an analysis of individual personality differences (e.g., using the MBTI or FIRO-B) and/or interpersonal group processes and dynamics.

Despite the increasing focus on teams as a way of life in organizations, some of us have wondered whether teams are, in fact, the equivalent of *Tagamet* for the contemporary organizational ulcers of under-empowered, under-affected employees who perform underpar. Although it is hard to argue that teams might *not* be useful in many work situations, particularly where task interdependence is high, surely they cannot be the solution to all of our problems as some over-zealous practitioners would have us think. Moreover, while many people write about the importance of effective teams in professional publications, few hard empirical studies exist that substantiate beyond a doubt the claims made by the team proponents. Given these questions and concerns, I once again (you knew this was coming) turned to several practitioners and researchers in the field for their reflections on the subject of teams. More specifically, the three-part question posed for this discussion was as follows:

In addition to supporting Dr. Landy's testimony and arranging a meeting for Dr. Landy with Congressional staffers, APA commented on the legislation through other outlets. In March, APA's Committee on Psychological Tests and Assessment (CPTA) sent a letter to the Senate Labor and Human Resources Committee, supporting Dr. Landy's position and urging a vote against the bill. After the bill was released from the Committee and returned to the Senate floor, William Howell, Executive Director for Science, sent a letter to then Senate Majority Leader Robert Dole (R-KS) urging him not to schedule the bill for Senate floor action or vote. A full Senate vote would be ill-advised, the letter states, because APA believes the legislation provides a stinging rebuke to experienced and productive public safety officers and promotes unfounded discriminatory policy.

As the Congress broke for August recess, the compromise bill, including the exemption to the bill will still under consideration. However, it's unlikely the bill will come to a Senate vote during the fall, given the amount of work remaining in finalizing FY 97 appropriations. In addition, sources say that Trent Lott (R-MS), the new Senate Majority Leader, will likely support Senator Jefford's position on the compromise.

1. Why are we collectively convinced (or are we really?) that a team approach to doing work is better than an individualistic one?

2. Do practitioners and managers understand the principles and uses of teams, or are they just using them as a cure all for the ailments of modern organizational life?

3. Under what circumstances do teams work well and how do we prevent them from failing?

Richard Guzzo, Professor of Psychology at the University of Maryland, provides the first set of comments on the subject. He reminds us of the cultural tensions inherent in a focus on teams, and highlights the importance of "enterprise-wide" organizational context in assessing success of failure.

1. The dominant role for teaminess in organizations changes with the times. In the 1960s teams were instruments of training and experience, thought to impart skills essential to effective management. In the 1970s teams became an antidote to worker alienation. In the 1980s teams were a solution to problems of quality and productivity that permitted foreign (especially Japanese) firms to surpass our own. And in the 1990s teams make for lean and flexible organizations. No matter how solid the footing of each rationale, in the United States teams have always existed in the context of individualistic organizations. Individuals get hired, promoted, fired, sued, and so on. It has never been either teams or individuals, nor will it ever be, I expect. The teamy—and effective—organization will depend on the right mix of individualism and teaminess.

2. Yes. My impression is that, among practitioners, the depth and sophistication of understanding teams have increased greatly in recent years. The now innumerable how-to books on teams are unobtrusive indicators of this. Check the business section of our local large bookstore for the most recent. While people like me often find such books wanting (for one reason or other, such as excessive illiteracy when it comes to research and theory or over enthusiastic one-sidedness), the fact is they do elevate and impart knowledge and systematic thinking about teams. Not long ago no such books could be found (I know; I thought about writing one). Their presence signals an audience minded to take seriously the role of teams in organizations and make them work well.

There is no doubt that teams occasionally get implemented as a misplaced curative for organizational ills. Here's a short list of examples: inspirational messages about how an organization is one big team; team spirit is tendered as the key to success; teamwork is said to be accounted for by a single rating of that aspect of individual performance made as part of the annual performance review; a token change is made to a sin-

gle management practice, such as fashioning a small percentage of compensation to be contingent on some measure of collective performance. Vague or single-pronged attempts to make teams happen will continue to be a problem, especially when they result in publicized failures that are taken as general indictments of a team approach to organizations.

3. My response reflects the influence of several colleagues, especially **Richard Campbell**, **Richard Hackman**, and **Greg Shea**. Conditions that contribute to team success include the following: One is a shared belief in the team that it can indeed be effective. Another is a strong sense of direction and goal accomplishment. Third, resources are required, for without them teams lose both their technical and motivational capacity to excel. Resources include the talents, experiences, and the like of team members as well as information, materials, and so on, available to the team. Fourth, team members need to share a common fate, most often expressed in organizations as recognition and monetary gains for team performance.

These conditions are brought about in several ways. A proper organizational context (e.g., information rich, supportive of teams, free of intergroup rivalries that obstruct productivity) is important, as are leaders. By leaders I mean people who are in positions "above" teams, who influence the context, control the resources, help establish direction, and who model effective team behaviors. How work is designed (e.g., how much discretion is invested in teams) also shapes the context in which teams perform.

Teams will sometimes fail, and sometimes in ways not preventable. But success or failure may not always be best measured at the team level. Rather, the best indicators of the success of teams in organizations may be at the organizational level of analysis, precisely because teams are elements of the larger organizational system and are intended to affect the enterprise as a whole. Many different indicators at the organizational level of analysis may be relevant, including productivity, quality, customer retention, the creation and persistence of intellectual capital within a firm, and employee well being, depending on the nature of the enterprise and the reasons for implementing teams. Whatever the specific measure, a focus on enterprise-wide success is quite consistent with the idea that the circumstances in which teams work, and not just the properties of the teams themselves, are critical.

Steven Rogelberg, assistant professor of psychology at Bowling Green State University, focuses his comments on the disparities in the existing research on teams and the myriad of moderating factors. He also provides an interesting checklist for why teams may be overused in organizations today.

1. I am not sure that I/O psychologists are collectively convinced that the team approach to work is better than the individualistic one. To be

collectively or individually convinced about the utility of an organizational approach, a preponderance of supportive and consistent data collected under wide-ranging circumstances/situations must be available. In the case of the team approach, these data do not yet exist.

Anecdotally, the data are certainly not consistently supportive. For every positive team experience cited, a negative one can also be cited. For every individual who likes working in a team, one can be found who dislikes working in a team. For every organization that successfully implements teams, an unsuccessful one can be identified.

A good deal of quality empirical team research exists. However, research has yet to be conducted that longitudinally compares the team approach with the individual approach in a field setting using "natural" work teams, doing "real" work. Furthermore, potential moderators of the effectiveness of the team approach, such as task type, organizational practices and policies, team composition, training, and managerial style have not been systematically studied in the field. Extant research that directly compares the team approach to the individual approach typically occurs in the lab using concocted teams working on a simulated task over the course of 1 or 2 hours. Research of this type has generally found that teams surpass the performance of their average individual member. Typically, though, only a minority of these teams surpass the performance of their best team member (e.g., Hill, 1982).

Taken together, does this anecdotal and empirical evidence (or lack thereof) discredit the team approach? Absolutely not. It merely suggests that team performance is variable and like any management tool has its boundary conditions. Quite simply, teams may not be applicable in all situations and circumstances, which leads to my answer to question b.

2. The sheer magnitude of information provided by trade magazines, books, and the popular press coupled with the fact that we spend a great deal of our childhood and adulthood operating and working in teams assures that practitioners and managers, generally, possess a working knowledge of the principles behind the use of teams. However, this working knowledge does not preclude the overuse of teams in situations where they are not warranted. Therefore, the question becomes, why are teams overused? From my research and experience, I speculate that teams are overused for a number of reasons: (a) Managers may perceive teams as the "ultimate" manifestation of empowerment and participative management, (b) the belief that the use of teams "enriches" a job, (c) the idea that as spans of management control widen, it is easier to manage two or three teams than 12-15 individuals, (d) the belief that employees like working in teams, (e) the belief that two heads are always better than one, and (f) the fear of alienating or excluding any one individual form the decision-making process. The final reason, and the

one that may explain a great deal of the overuse of terms, is the fear of not using them because other organizations are using them. In other words, managers and practitioners do not want to "miss out" on the latest management intervention.

3. The most commonly advocated keys to team success concern team composition, training, and management. First, it is essential to select the right individuals for the team and the right "mix" of individuals for the team. Second, the organization should provide training in team building, conflict management, and the soliciting and giving of feedback. Third, teams should be provided with the necessary resources and support to do their work and, at the same time, the authority to do it in the way they choose. Finally, the organization needs to create HR practices geared to the team level (e.g., team level reward systems, team level performance appraisal systems). Besides these often recommended strategies for success, I would like to outline some of the less discussed keys to team success.

Task Appropriateness and Requirements. Many major technical models of team effectiveness (e.g., Steiner's and Gladstein's work) suggest, and data tends to support, that task demands and requirements moderate the relationship between team processes and team effectiveness. Therefore, it follows that prior to a team working on a task(s), they should be trained to critically evaluate the task's specifications, requirements, and demands. Using this information, it can be determined if a team approach is even warranted. Just as it would not be recommended that a manager blindly delegate tasks to any individual, it is imperative to critically examine whether the task(s) is appropriate for the team approach; it is often erroneously assumed that teams can and should handle all tasks.

Assuming that the team approach is warranted, the team can use the information collected from the task evaluation to carefully analyze the process requirements of the task(s) prior to any actual work. Specifically, the team should think about how to function, and the types of interactions and approaches necessary to be effective. Team attention to the process requirements of tasks will help the team choose an appropriate process, which, in turn, increases team effectiveness.

Along with identifying the process requirements of a task, a team should be made to realize that conventional methods of teamwork may not always be the best process tool. Specifically, there are instances where teams should break from conventional methods and use nontraditional methods such as a computer assisted approach, devil's advocacy approach, a Nominal group approach, or a Stepladder Technique approach. For example, if a task requires all individuals to contribute unique information and is very susceptible to being "solved" prematurely, then the Stepladder Technique may be an appropriate process

tool (Rogelberg, Barnes-Farrell, & Lowe, 1992). Both understanding of task requirements and familiarity with various process approaches will enable teams to choose the process tool that fits the task.

Managing Critical Intersections. No matter how vested an organization is in the team approach, team members always have individual responsibilities. This creates a critical intersection between an individual's job responsibilities and his/her team responsibilities. One principal role of a supervisor should be to work with the individual team members to examine and manage these critical intersections by identifying and rectifying any conflicting expectations, roles, goals, or ambiguity associated with the dual roles.

Charles Manz, Associate Professor of Management at Arizona State University, provides the next set of comments on teams and teamwork in contemporary organizational life. He points out the need to have realistic expectations regarding how fast and under what conditions teams can produce significant results, but also to beware of self-fulfilling prophecies of failure.

1. The team approach is definitely not always better than an individual approach. In fact, when teams are first installed, things tend to get worse before they get better. Typically, this downturn in performance seems to last about 1 to 2 years before the bugs are worked out of the system. Also, if teams are done for the wrong reasons (e.g., a copycat fad approach) or without adequate commitment and investment up front, they are very prone to failure. On the other hand, when teams are implemented well and with commitment, they can create significant synergies, psychological ownership for team members, a variety of group process advantages, a source of support for employees, and so forth, that can result in impressive competitive advantages.

Learning to implement teams effectively reminds me of the challenge of learning to play golf properly as opposed to just hacking around a golf course. For most people, learning the appropriate grip, stance, and swing motion feels very awkward at first and can be very frustrating and result in giving up on playing properly. For those who stick it out, however, and get the proper training, practice, and invest in quality equipment, a very effective game of golf can be the result. Unfortunately, as with teams, many are just not willing to invest the time, effort, and expense that is needed for effective performance.

2. First, let me point out that poor understanding of teams is not restricted to practitioners. I find it interesting how often studies by academics conclude that teams do or don't work when a variety of characteristics of the sample confound the results. For example, studies of newly formed teams (e.g., in what has come to be known as the "storming stage") are logically going to find significant performance

problems and other negative outcomes. Yet results are sometimes reported as though they apply to mature established teams. Other studies claim to focus on teams but only address temporary work groups, such as quality circles, that meet only a couple of hours a week.

As far as practitioners are concerned, some understand teams and some don't. Some embrace the philosophy of team empowerment and educate themselves concerning how best to go about implementing teams. Others espouse a philosophy and commitment to empowerment and teams and proceed to act in ways that contradict what they espouse. I've even observed teams being used as a device for increasing control over the workforce to assure bureaucratic company policies were closely followed. Not surprisingly, in such cases team members report disempowerment and frustration and performance tends to suffer.

Perhaps the real challenge for practitioners and academics alike is to make sure that when the word "team" is used that it is in reference to something that can legitimately be called a team. I've observed both research and practice focusing on structures that are obviously anything but what most of us mean by teams and yet using the label "team" because it is a hot topic.

Also, realistic expectations are important. The team approach can be threatening and difficult for both managers and team members at first and patience while the system develops is very important. Further, lots of learning and skill development is required. In particular, a new approach to leadership is needed that builds effective self-leadership in the team rather than creating dependence on central leaders (Manz & Sims, 1996).

3. Teams work especially well when organizations adequately prepare them and invest in them. Taking the time to have a cross-section of the organization develop a work design that fits with the work system and the people in it, investing in plenty of relevant training and making sure that very good equipment and other required resources are available are among the more important ingredients for success for teams (Manz and Sims, 1995). Of course, a variety of contextual factors—type of technology, nature of the work, background and characteristics of the work force, whether it's a green field site or an established work system, and so forth—are important considerations as well.

Interestingly, however, the companies that seem to be most likely to have positive experiences with teams are the ones that decide that the teams will succeed no matter what it takes and are willing to invest to ensure this success. The self-fulfilling prophecy is alive and well with teams. If they are approached timidly on an experimental basis, with one hand on the escape button, they are probably doomed from the start.

The final set of comments from our "team" on teams comes from **Richard Hackman**, Cahners-Rabb Professor of Social and Organizational Psychology at Harvard University. He highlights the difficulties in achieving that ever elusive notion of group "synergy" that so many proponents of teams advocate in their work.

A few years ago, Paul Osterman, an economist at MIT, did a careful national survey of innovative work practices in U.S. firms. He found that more than half the companies surveyed were using teams—and that some 40% of these companies reported having more than half the organization working in teams.

The popularity of teams certainly is understandable. Teams bring more resources, and more diverse resources, to bear on a task than could any single performer. They offer flexibility in the use of those resources—the capability to quickly re-deploy member talents and energies and to keep the work going even when some members are unavailable. Cross-functional teams, very much in vogue these days, can break down traditional organizational barriers and get people pulling together toward the overall objectives of an enterprise. And, of course, teams offer the potential for synergy, that wonderful state when a group "clicks" and members achieve something together that no one of them could possibly have accomplished alone. These are big-time benefits, a potentially significant competitive advantage. No wonder Osterman found that teams are so popular.

But there is a puzzle here, in that teams usually do less well—not better—than the sum of their members' individual contributions. I first encountered this bleak fact as a beginning doctoral student at Illinois. In a course on group dynamics, Ivan Steiner put on the board his now well known equation $AP = PP - PL$. That is, the actual productivity of a group equals its potential productivity minus process losses. Thinking that I'd had my first scholarly insight, I told Ivan that there was a term missing in his equation. It really should read $AP = PP - PL + PG$, the last term, "process gains," being that special synergy that groups sometimes achieve. "Fine," Ivan said. "Find me the evidence for process gains and I'll gladly add your term." The evidence, of course, was nowhere to be found. If anything, Ivan's models, elegantly described and documented in his book *Group Process and Productivity* (Academic Press, 1972), *over* predict actual group performance.

This is true—at least for groups in the experimental laboratory. Maybe that context is so constraining that groups do not have the elbow room to show what they can do. Maybe the real advantages of groups are to be found in organizational practice rather than in research laboratories. I came up short on this hypothesis as well, this time at the hands of Bill Hicks, an editor at Jossey-Bass. My colleagues and I had completed an intensive study of some 33 different work groups of all

different kinds—athletic teams, industrial production workers, top management teams, prison guards, airline crews, economic analysts, and more. We pulled our findings together in a book that I proposed be titled *Groups That Work*, a catchy phrase with what I thought to be a clever pun. Bill sat me down and said he'd be happy to publish the book, but not with that title: There were just too many groups in our study that barely worked at all. I went back to the manuscript and found that he was right: probably four of our 33 groups were actually effective teams. The rest had problems so severe that our analysis was mainly about what had gone wrong with them. So the book was published with a parenthetical phrase after my clever title: *Groups That Work (And Those That Don't)*. Anyone who actually reads through it will discover, as Bill did, that most of our groups lie within the parentheses.

If neither laboratory research nor organizational practice provides agreeable data, one can always turn to the ultimate test of a theoretical proposition: personal experience. I serve on lots of faculty committees, self-managing teams each and every one. Whereas the authors of one of the many books touting the benefits of teams report that a single self-directed team now produces in 3 days what it formerly took an entire assembly line 2 weeks to produce, I sometimes conclude that any single member of a faculty committee could generate in 3 hours what it takes the group 2 *months* to produce.

What is going on here? Why is evidence about teams from laboratory experiments, organizational practice, and personal experience so at variance with what is claimed for them, and with their theoretical potential?

For one thing, groups often are used when they shouldn't be. Consider, for example, tasks such as creative writing and executive leadership. There are not many great novels, symphonic scores, or epic poems written by a team. This kind of work involves bringing to the surface materials that lie deep in one's unconscious, and that's inherently more an individual than a collective undertaking. The same is true, I believe, for creative executive leadership. For all the attention being given to top management teams these days, my reading of the management literature is that the great majority of successful organizational startups and turn-arounds are led by a single inspired and courageous human being. I doubt that it could be otherwise.

The more common reason for substandard group performance is that managers make serious mistakes in designing, supporting, and leading teams. Too often they gather some people together (a *lot* of people so that the team has plenty of resources and all stakeholders are represented), toss it a task, and hope for the best. That's not good enough. Research evidence is now starting to identify the organiza-

bottom-line regarding the use of teams in organizations is still in question. That is, of course, unless as Scott Adams (1996) has noted, "the employees in your company are a bunch of independent, antisocial psychopaths" in which case "you might need some team-building exercises" (p. 280) after all.

I would like to thank Rick, Steven, Charles, and Richard for their thoughtful comments regarding teams and teamwork in organizations. Thanks again to Janine Waclawski for her feedback and assistance in making the questions "spicier," and to Mary Zippo for fixing my innumerable typos. As if you don't know already, please send your reactions and suggestions to me at W. Warner Burke Associates Inc., 201 Wolfs Lane, Pelham, NY, 10803, (914) 738-0080, fax (914) 738-1059, or by e-mail at AllanHC96@AOL.COM. I look forward to hearing from you.

References

Adams, S. (1996). *The Dilbert principle.* New York: HarperBusiness.

Cohen, S. G. (1993). New approaches to teams and teamwork. In J. R. Galbraith, E. E. Lawler, & Associates (Eds.), *Organization for the future: The new logic for managing complex organizations* (pp. 194-226). San Francisco: Jossey-Bass.

Guzzo, Richard A., Salas, Eduardo & Assoc. (1995). *Team effectiveness and decision making in organizations.* San Francisco: Jossey-Bass.

Guzzo, Richard A. & Dickson, Martha (1996). "Teams in organizations: Recent research on performance and effectiveness." *Annual Review of Psychology, 47.*

Hill, M. (1982). Group vs. individual performance: Are N+1 head better than one? *Psychological Bulletin, 91,* 517-539.

Manz, C. C. & Sims, H. P. Jr. (1995). *Business without bosses. How self-managing teams are building high-performing companies.* New York: Wiley.

Rogelberg, S. G., Barnes-Farrell, J. L., & Lowe, C. A. (1992). The stepladder technique: An alternative group structure facilitating effective group decision making. *Journal of Applied Psychology, 77,* 571-587.

Sims, H. P. Jr. & Manz, C. C. (1996). *Company of heroes: Unleashing the power of self-leadership.* New York: Wiley.

Biographies

Richard A. Guzzo is Professor of Psychology at the University of Maryland. He received his Ph.D. in Administrative Sciences at Yale University and was previously on the faculties of McGill University and New York University. Rick has numerous publications on teams, including (with Eduardo Salas) *Team Effectiveness and Decision Making in Organizations* (1995) and *Teams in organizations: Recent research on performance and effectiveness* (with Marcus W. Dickson) in *Annual Review of Psychology* (1996). Rick's other research interests include productivity and employee and employer loyalty. He also has served as a consultant to a number of organizations on these and related issues.

Steven J. Rogelberg received his Ph.D. in Industrial and Organizational Psychology from the University of Connecticut in 1994. He is currently assistant professor of psychology at Bowling Green State University and has published and presented research on team processes and performance, customer service behavior and satisfaction, and survey measurement.

tional conditions that must be in place for a team to have a real chance for effectiveness, and these conditions have much to do with structural and contextual features that cannot be implemented through mere exhortation. Creating the conditions for team effectiveness, it turns out, requires that managers know some things and know how to *do* some things. Unless we researchers do our part in pinning down just what the minimum critical conditions for team effectiveness are, and unless managers do their part in taking the time and trouble to get those conditions in place, then there is a real risk that work teams will go the way of all the other easy-answer organizational fixes that have had their day and then gone away.

So what's the story on teams? Well, for starters, based on the comments above, it appears as though a large portion of leaders and managers in organizations are using teams and teamwork as a cure for whatever ails them, and yet as Steven and Richard note, we are a long way from having consistent concrete support in the literature that teams do in fact yield significant gains in productivity or performance over the individual. The research just isn't there. Even if the effective use of teams could be clearly and concisely delineated, there are other forces stacked against its complete and utter acceptance in organizations today. Most of our standard I/O personnel practices (e.g., selection, performance assessment, promotion, career development) are based on individual not group-based measures and methodologies. Moreover, the notion of operating in teams and relying on other people for the quality of one's work simply doesn't fit well in organizations composed of employees from primarily individualistic cultures as Rick pointed out. Thus, the cards are apparently stacked against the effective use of teams in many organizational settings, particularly when such efforts are adopted purely in response to the need to have some teamwork initiatives "in place." Going with the latest fad, as Steven and Charles argue, should not be the reason to implement a team approach to doing work.

Despite these formidable odds, all four of our contributors chose to highlight factors, moderators and means for establishing and maintaining strong performance-driven teams in organizations. Some of these include a shared belief system among members, a strong sense of purpose, direction and investment in their eventual success, adequate systemic support and resources, group- or team-based rewards and incentives, having the right "mix" of individuals in terms of talents and skills, adequate training in interpersonal and group relations, and of course, let's not forget the level of complexity and interdependency of the task at hand. Clearly, these practitioners and researchers haven't given up on the notion of teams. It is important to remember, however, that while working for increased involvement and empowerment through group participation is a good thing to pursue from a social-organizational and humanistic values perspective, the real

1997 IPMAAC Conference
Call for Proposals

The International Personnel Management Association Assessment Council (IPMAAC) will hold its 1997 conference on June 22-26 in Newport Beach, California. The conference will offer a diverse program of assessment-related topics. You do not need to be an IPMAAC member to submit a proposal. All topics within the area of personnel assessment and selection are welcome at the conference, as are related topics within the field of personnel management. Proposals are encouraged in the following areas:

➤ **Challenges/innovations in personnel assessment**

➤ **Programs and practices demonstrating excellence in assessment**

➤ **Strategies/techniques used to manage the assessment function**

➤ **Information technology in personnel assessment**

➤ **The impact of environmental changes (e.g., reengineering, quality initiatives, regulatory changes) on the assessment function**

The submission deadline is December 13, 1996. For more information, or to discuss program ideas please contact the Conference Co-Chairs:

Mike Willihnganz
mwillih@smud.org
(916) 732-6051

David Dye
dadye@wpsmtp.mail.opm.gov
(202) 606-3742

Special Note for Students: IPMAAC strongly encourages student participation through special membership rates, special conference attendance rates, and the annual student paper competition. The student paper competition is open to any type of student paper including a thesis or dissertation. The winner will be invited to present the paper at the 1997 conference in Newport Beach, California, and will receive up to $600 in travel expenses, free conference registration, and a one-year membership in IPMAAC.

The submission deadline for the student paper competition is December 31, 1996. For information contact the Chair of the Student Paper Competition:

Thung-Rung (T.R.) Lin
validtest@aol.com
(213) 743-3532

For a copy of the submission procedures for conference presentations or the student paper competition, please contact: Marianne Ernesto, IPMAAC Secretariat, International Personnel Management Association, 1617 Duke Street, Alexandria, VA 22314, Phone: (703) 549-7100.

Visit the IPMAAC home page on the World Wide Web!
(http://www.ipmaac.org)

Charles C. Manz is an Associate Professor of Management at Arizona State University. He received his Ph.D. from Pennsylvania State University. His research has focused on self-leadership, self-managing work teams, leadership, power and control, learning, group processes, and various human resource management related topics. He has published over 75 articles and 6 books (the most recent of which are listed above in the references), and he has also served as a consultant for many Fortune 500 corporations.

J. Richard Hackman is the Cahners-Rabb Professor of Social and Organizational Psychology at Harvard University. He received his undergraduate degree in mathematics from MacMurray College in 1962, and his doctorate in social psychology from the University of Illinois in 1966. He taught at Yale until 1986, when he moved to Harvard. Professor Hackman conducts research on a variety of topics in social and organizational psychology, including the performance of work teams, social influences on individual behavior, and the design and leadership of self-managing units in organizations. He has been on the editorial board of several professional journals, and has consulted with a number of organizations on issues regarding work design, leadership, and team performance. He is the author or editor of six books and over 60 chapters and articles. His most recent book is *Groups That Work* (Jossey-Bass, 1990). Professor Hackman was winner of the Sixth Annual AIR Creative Talent Award in the field of "Measurement and Evaluation: Individual and Group Behavior," and was awarded the Distinguished Scientific Contribution Award of the Society of Industrial and Organizational Psychology in 1992. He is a Fellow of the American Psychological Association and of the American Psychological Society.

OBITUARIES

M. SCOTT MYERS

1922-1996

M. Scott Myers, one of the most innovative and influential industrial-organizational (I/O) psychologists of the 20th Century, passed away on May 8, 1996, in Fort Walton Beach, FL, after a brief illness from cancer. He liked to challenge conventional thinking and was usually far ahead of his time. As an I/O practitioner, Myers pioneered major advances in cross-cultural testing, organization development, job enrichment, employee empowerment, self-directed work teams, job posting, attitude surveys, total quality management, the human side of just-in-time manufacturing, employee profit-sharing, collaborative union-management relations, and many other areas. Myers was known for his hard-work, positive attitude, insight, integrity, patience, humor, and modesty. He also believed strongly in the dignity and worth of each person. Although he was probably better known by managers and executives than by I/O psychologists, he was proud to be an I/O psychologist and considered it the highlight of his career when his peers elected him to SIOP Fellowship in 1994.

Born in 1922, Myers was one of eight children in a family who lived and farmed on the remote island of Orcas in Puget Sound in the state of Washington. There were many hardships, and Myers had to begin supporting himself by age 13. After graduation from Bellingham High School in 1940, Myers got a job as an engineering aide at the Mare Island Navy Yard where his supervisors recognized his ability and helped him get into college. Myers began his college work at Indiana Technical College in 1942 but transferred to Purdue University in 1943, where he received a BS degree in psychology in 1948. Myers continued at Purdue for graduate school, earning a MS degree in industrial psychology in 1949 and a Ph.D. in industrial psychology in 1951 under the guidance of Charles H. Lawsche and H. H. Remmers.

It is worth noting that Myers worked his way through college as a barber at the Purdue Student Union. These were the days of segregated barber shops, but Myers rejected traditional practice and became the first campus barber to serve all customers, regardless of race or ethnic group. The other campus barbers soon followed his example and later elected Myers as the president of the local barbers union.

From 1951 to 1954, Myers worked as supervisor of personnel planning for Hughes Aircraft in Culver City, CA, where he supervised six employee counselors, conducted personnel research (e.g., human resource planning, test validation, performance appraisal), and developed a company wide employee suggestion system. On the side, he taught classes in personnel management at Los Angeles State College.

In 1954, Myers accepted a 3-year assignment from the University of Southern California to work in Iran as a visiting professor at the University of Tehran, where he taught classes and directed the Personnel Management and Research Center (PMRC). At the PMRC, Myers teamed with Dr. Iraj Ayman, a local I/O psychologist, to train staff in psychometrics, develop psychological tests for the Persian culture, conduct validation studies, provide employment testing services, and publish papers on personnel management in the Persian language. For this work, the Shah of Iran awarded Myers the Gold Medal of Cooperation for advancing education in Iran. Myers extended his stay in Iran for 2 more years as a training advisor for the Governmental Affairs Institute, Washington, DC. This permitted him to continue his work with Dr. Ayman to translate textbooks into the Persian language, publish a compendium of facilities available in Iran for academic and vocational training, and serve as a consultant for the selection and training of technicians in public utility systems.

In 1959, Myers returned to the USA to become a management research consultant for Texas Instruments Inc. (TI), an international electronics manufacturing company with 24,000 employees based in Dallas, TX. During the 1960s, TI achieved record growth and profits under the leadership of its president, Pat Haggerty, who recognized that TI's employees were the key to success. Thus, Haggerty gave the green light to Myers and his I/O colleagues (e.g., Marvin Berkeley, Ph.D.; Gary Holmgren, Ph.D.; Charles Hughes, Ph.D.; Donald Wass, Ph.D.; Earl Weed) to apply the best that I/O psychology had to offer to unlock the potential of TI's human resources.

What was so interesting about TI in the 1960s was that Myers and his colleagues seem to have applied every aspect of I/O psychology to every aspect of TI. It was as if the *Handbook of I/O Psychology* had come to life,

and everything was the state of the art. They experimented with many new ideas that seemed radical at the time (e.g., sharing management information with employees, allowing employees to plan and control their own work, providing common dining room facilities for managers and employees). The public got its first real look at what TI was doing when Myers (1964) published an article in the *Harvard Business Review* on "Who Are Your Motivated Workers?" The article is one of *HBR*'s all-time best sellers and inspired me to seek a career in I/O psychology. (Four years later in 1968, it was my good fortune to have Scott Myers, Charles Hughes, and Gary Holmgren advise me on my master's thesis at Southern Methodist University.) After publishing several more best-selling *HBR* articles (e.g., "Conditions for Manager Motivation" and "Breakthrough in On-the-Job Training"), Myers presented a comprehensive view of his TI work in his classic 1970 book *Every Employee a Manager*, which he revised in 1981 and 1991 to add new topics and show what could be done in other organizations. This book is must reading for both managers and I/O psychologists.

From 1969 to 1971, Myers served as a visiting professor of organizational psychology and management at the MIT Sloan School of Management, after which he returned to TI for 2 more years. Myers left TI in 1973 and established his own international consulting practice with his wife Susan to provide seminars and technical advice to private corporations, government agencies, and other organizations. He had over 1,000 clients and remained active and productive to the end.

Scott Myers is survived by his wife Susan Sloat Myers of Fort Walton Beach, FL. Susan, who is an associate member of SIOP and a co-author of several of Scott's publications, requests any memorial contributions be made to "The Dayton Foundation/M. Scott Myers Fund" at the SIOP Foundation. Please contact Lee Hakel, SIOP Administrative Office (tel. 419-353-0032), for more information.

Selected Bibliography

Myers, M. S. (1964). Who are your motivated workers? *Harvard Business Review, 42,* 73-88.

Myers, M. S. (1966). Conditions for manager motivation. *Harvard Business Review, 44,* 58-71.

Gomersall, E. R., & Myers, M. S. (1966). Breakthrough in on-the-job training. *Harvard Business Review, 44,* 62-72.

Myers, M. S. (1991). *Every Employee a Manager* (3rd ed.). San Diego, CA: Pfeiffer.

Myers, M. S. (1994). *Rhymes of the ancient manager.* Fort Walton Beach, FL: Choctaw.

Lance W. Seberhagen
Seberhagen & Associates

UPCOMING CONFERENCES AND MEETINGS

This list was prepared by David Pollack. If you would like to submit additional entries, please write David Pollack, U.S. Immigration and Naturalization Service, 425 I Street, NW, Room 2038, Washington, DC 20536, (or call (202) 305-0081, or FAX entries to (202) 514-4200).

1996

Oct 29-Nov 2	16th O.D. World Congress. Cairo, Egypt. Contact: Organizational Development Institute, (216) 461-4333.
Nov 6-9	Annual Convention of the American Evaluation Association. Atlanta, GA. Contact: AEA, (804) 225-2085.

1997

Feb 24-26	Corporate Dynamics Midwest Training Conference. Oakbrook Terrace, IL. Contact: Meg Nigro, (708) 778-9991.
March 25-29	Annual Convention, American Educational Research Association. Chicago, IL. Contact: AERA, (202) 223-9485.
March 25-29	Annual Convention, National Council on Measurement in Education. Chicago, IL. Contact: NCME, (202) 223-9318.
April 11-13	Twelfth Annual Conference of the Society for Industrial and Organizational Psychology. St. Louis, MO. Contact: SIOP, (419) 353-0032.
April 27-30	25th International Congress on the Assessment Center Method. London, England. Contact: DDI, (412) 257-3952.

Calls for Papers

First Regional Congress of Psychology of Professionals in the Americas (Note: This is a change of dates for the previous announcement.) Psychologists doing work in any specific area of applied psychology are invited to submit papers. For example, in organizational psychology, health psychology, psychological assessment, environmental psychology, educational, instructional and school psychology, clinical and community psychology, applied gerontology, psychology and national development, economic psychology, psychology and law, psychology and politics, sport psychology, traffic, evaluation research, and professional psychology issues. There will be invited state of the art addresses, symposia, workshops, thematic sessions and posters. A series of touristic and professional visits will be an important complement of the congress.

July 27–August 2, 1997, in Mexico City, Mexico. For further information, please contact Susan Pick, Ph.D. at Congreso@datasys.com.mx, telephone and fax: 525/598.23.42 or by courier at Apdo. Postal 41/756 Mexico, DF. 11001, Mexico.

Management Practice. The aim of Management Practice is to provide a forum for original case study, observational, and field research on broad topics in management and organization. We encourage submissions from consultants, managers, and others who apply theory and practical experience to client organizations. We especially encourage articles on emergent topics—those not yet sufficiently well-defined to warrant sophisticated designs and complex statistical analyses—and on novel implementations—such as methods of merging organizations, newly developed compensation systems, and new approaches to analyzing management systems. Management Practice appeals to an audience with experience in general management, business administration, finance, industrial/organizational psychology, and engineering. Authors should use language and explanations that will appeal to this broad audience. Please address inquires regarding submissions and subscriptions to: Dr. Robert E. Lewis, Editor, Management Practice, P.O. Box 932, Lawrence, KS

103

May 18-22   Annual Conference of the American Society for Training and Development. Washington, DC. Contact: ASTD, (703) 683-8100.

May 23-26   Annual Convention of the American Psychological Society. Washington, DC. Contact: APS, (202) 783-2077.

June 22-25   Annual Conference of the Society for Human Resource Management. San Diego, CA. Contact: SHRM, (703) 548-3440.

June 22-26   Annual Conference of the International Personnel Management Association Assessment Council. Newport Beach, CA. Contact: IPMA, (703) 549-7100.

July 19-23   Annual Conference of the American Society for Public Administration. Philadelphia, PA. Contact: ASPA, (202) 393-7878.

Aug 10-13   Annual Meeting, Academy of Management. Boston, MA. Contact: Academy of Management, (914) 923-2607.

Aug 10-14   Annual Convention of the American Statistical Association. Anaheim, CA. Contact: ASA, (703) 684-1221.

Aug 15-19   Annual Convention of the American Psychological Association. Chicago, IL. Contact: APA, (202) 336-6020.

Sept 22-26   Annual Conference of the Human Factors and Ergonomics Society. Albuquerque, NM. Contact: The Human Factors and Ergonomics Society, (310) 394-1811.

Sept 24-26   Eighth Annual International Conference on Work Teams. Dallas, TX. Contact: Center for the Study of Work Teams, (817) 565-3096.

Conference Announcements

The Boston Center of The A.K. Rice Institute (CSGSS) announces its 1997 Residential Conference on Group Relations: Authority, Leadership and Partnership in Organizations, on January 15-19, 1997, Mount Marie Conference Center, Holyoke MA. The Director is Evelyn D. Cleavely, Associate staff member, Tavistock Institute of Marital Studies.

An experiential conference in the Tavistock tradition, this conference is designed to enable members to extend their awareness of group and organization processes and of their participation in them. The method is learning through experience and reflection. The design of the conference is based on the assumption that by examining and interpreting experiences within the conference institution, members will be enabled to enlarge their understanding of their own institutions and their roles in them.

The design allows members to explore among other things: the impact of unconscious fantasy and dynamics on work groups; the significance of visible and invisible boundaries and how they are managed; the difference between the stated task of a group and the task it actually appears to be pursuing; discrepancies between official roles and those individuals are called upon to play; discrepancies between formal and informal authority.

The conference is designed for members from diverse occupations: professionals, business women and men, community leaders, organizational consultants, program directors, administrators, managers, students, an paraprofessionals. Individuals from business, education, mental health, law government, social services, and religion have attended conferences in the past.

The primary task is to provide opportunities to study the exercise of leadership, authority, and partnership in the context of interpersonal, intergroup, and institutional relations within the conference.

For further information and an application please contact: CSGSS, c/o Tim Mize, 34 Chester Rd., Belmont MA 02178, TimMize@AOL.COM.

Australian Industrial and Organisational Psychology Conference. This is Australia's second conference on Industrial and Organisational Psychology. It will be held at the Melbourne Hilton on the Park, Victoria, on Saturday 28 and Sunday 29 June, and preceded by workshops on 27 June, conducted by renowned psychologists. The first conference (1995) was an enormous success, drawing an exciting range of international and local speakers. The second conference will feature keynote addresses, symposia and posters on topics in industrial and organisational psychology, and allied disciplines (e.g., human resource management, applied social psychology). It seeks submissions including rigorous empirical tests and theoretical developments and reviews, and those encompassing applications of concep-

---

66044. To encourage wide participation in the journal, submissions should be limited to five single-spaced pages, including abstract and references.

Calls for Nominations

The Division Of Consulting Psychology of the American Psychological Association announces the 1996 RHR International Award for Excellence In Consultation. The RHR International Award is given to an APA member whose career achievements reflect outstanding service to organizations, public or private, by helping them respond more effectively to human needs. Primary emphasis is placed on the practice of consultation rather than other accomplishments in the field, such as teaching, research or publications. This award, accompanied by a check for $1,500, is funded annually by the consulting firm of RHR International in honor of a founding member, Perry L. Rohrer, who epitomized the standards of excellence which they and the Division of Consulting Psychology seek to perpetuate. Nomination dossiers should include a letter of nomination, the nominee's current resume or C.V. and appropriate supporting documentation such as letters from colleagues or clients, publications, or other evidence of the significance and impact of the nominee's work.

Send Nominations to: Paul Lloyd, Ph.D., Chair, Division 13 Awards Committee, Lloyd & Associates, 808 Alta Vista, Cape Girardeau, MO 83701. Nomination Deadline: January 15, 1997.

The Division Of Consulting Psychology of the American Psychological Association announces the 1996 Harry Levinson Award for Excellence In Consultation. The Harry Levinson Award is given to an APA member who has demonstrated exceptional ability to integrate a wide range of psychological theory and concepts and convert that integration into applications by which leaders and managers may create more effective, healthy, and humane organizations. This award, funded by the earnings from a trust fund established by Harry Levinson and administered by the American Psychological Foundation will offer a check for $1,000. Nomination dossiers should include a letter of nomination, the nominee's current resume or C.V. and appropriate supporting documentation such as letters from colleagues or clients, publications, or other evidence of the significance and impact of the nominee's work.

Send Nominations to: Paul Lloyd, Ph.D., Chair, Division 13 Awards Committee, Lloyd & Associates, 808 Alta Vista, Cape Girardeau, MO 83701. Nomination Deadline: January 15, 1997.

tual and empirical development useful for practice illustrative of developments in I-O psychology and related areas.

Come and explore the exciting venue: See Melbourne and other parts of Australia. For information on the conference and registration information, contact The Conference Coordinator, Australian Industrial and Organisational Psychology Conference, The Australian Psychological Society Ltd, PO Box 126, CARLTON SOUTH, VICTORIA, 3053 AUSTRA-LIA, Email: CHERRY@apsnho.mhs.compuserve.com, Telephone: 61 3 9663 6166, Fax: 61 3 9663 6177. Submissions may consist of individual posters or symposia on a thematic range of papers. Submissions are due 3 February 1997. If you wish to make a personal contact about submissions, please contact Phyllis Tharenou, Department of Business Management, Monash University, PO Box 197, CAULFIELD EAST, VICTORIA, 3145, Telephone: 61 3 9903 2933, Fax: 61 3 9903 2718, e-mail: phyllis.tharenou@BusEco.monash.edu.au

INDUSTRIAL & ORGANIZATIONAL PSYCHOLOGY INTERNSHIP OPPORTUNITIES. GTE, a leader in telecommunications, is seeking candidates for internships in its Employee Capability and Competency Design Department. These positions will provide the opportunity to gain experience in a large corporation and to become an active participant in a Human Resources team. The intern will assist I/O Psychologists in planning and carrying out content and/or criterion-related test development and validation projects, writing technical reports, and other related projects.

Candidates must be advanced Ph.D. students in I/O psychology (3rd or 4th year). Training or experience in job analysis, development and validation of paper-and-pencil tests and structured interviews, competency modeling, and criterion development is required. Knowledge of current legal and professional guidelines for employee selection procedures are also required. A solid background in psychometrics is essential, and experience with SAS, SPSS, or a similar statistical package is highly desirable. Candidates must be able to cooperate in team efforts and have strong interpersonal, organizational, and communications skills, both oral and written.

These internships are full-time positions with a duration of six to twelve months. Internships will start at various times during the year. All positions are located in Irving, Texas. Interested applicants are invited to submit a resume, desired start date, a list of references, and graduate transcript to: Nancy T. Tippins, Ph.D. GTE Telephone Operations, 700 Hidden Ridge, HQW01J52, Irving, Texas 75038

I/O EXTERNSHIP: The Vandaveer Group, Inc., an emerging premier human resources and management consulting firm headquartered in Houston, Texas, is offering a one year, full time consulting opportunity for a "high potential" Ph.D. in I/O psychology or related area. Designed to offer rich practical experience and professional development of the extern, this position can serve as the one year's post-doctoral supervised experience requirement for licensure.

Qualified candidates will have completed the requirements for their Ph.D. prior to starting, and have exceptional analytical (quantitative *and*

107

qualitative), conceptual and innovative thinking, listening, and communication skills, initiative, track record for getting things done with high quality and on time, flexibility, and high "social intelligence."

Preference will be given to those with broad exposure to psychology and business literatures; and a science-practice orientation, grounded in solid practical thinking. Previous internship or business experience is desirable.

To apply, please send a cover letter, resume or vita, and the names and telephone numbers of three references (academic faculty and/or internship supervisor(s)) to: The Vandaver Group, Inc., 520 Post Oak Blvd, Suite 260, Houston TX 77027. The Vandaver Group is an equal opportunity employer. Deadlines: March 15 (for June start); June 15 for September start).

HUMAN RESOURCES RESEARCH INTERNSHIP SBC Communications, Inc. (formerly Southwestern Bell Corporation) is currently accepting applications for pre-doctoral I/O Psychology internships in Human Resources Research and Planning.

The internship program gives students with a solid I/O background an opportunity to apply their training in a corporate environment. Interns work with two I/O Psychologists, independently, and with other Human Resource professionals on applied research and selection process development. The internship is designed to allow students to be responsible for entire projects from beginning to end. We also emphasize the importance of students completing the work needed for their degrees.

Qualified candidates should be advanced Ph.D. students (preferably 3rd or 4th year) in I/O psychology and should have completed a Masters degree or equivalent. Preference will be given to applicants with experience in job analysis, test development, and validation. Strong research, analytical, written and interpersonal communication skills are required. Experience in SAS is also desired.

These internships are full time and last for six months, beginning in January or July. The deadline for completed applications is October 15 for the internship beginning in January, and April 15 for the internship beginning in July. Please send cover letter and resume to: Anna Erickson, Ph.D., SBC Communications, Inc., 175 East Houston, Room 5-D-9, San Antonio, TX 78205.

INDUSTRIAL PSYCHOLOGY INTERNSHIP: Bell Atlantic Corporation is currently accepting applications for full-time internship positions in its Selection Research Department. Bell Atlantic is a leader in the telecommunications industry and offers interns the opportunity to obtain experience working in a fast-paced corporate environment. Internships begin at various

times of the year, depending on project requirements, and normally last 12 months. All positions are located in Arlington, VA.

Bell Atlantic's Selection Research Department is responsible for developing, validating, and assisting with the implementation of selection systems throughout the Corporation. Other projects have involved work on performance appraisal, test preparation courses, and survey development. Interns work on all phases of projects from conceptualization to implementation.

Qualified candidates should possess at least a Master's degree in industrial/organizational psychology or equivalent. Strong written communication, interpersonal, research, and statistical skills are critical. Experience with SPSS is desirable.

Interested applicants should send a resume, graduate transcript, writing sample, and desired start date to: Jill K. Wheeler, Bell Atlantic Corporation, 1310 N. Court House Road, Upper Lobby, Arlington VA 22201

I/O PSYCHOLOGY AT GEORGIA TECH: The School of Psychology at the Georgia Institute of Technology has at least one and possibly two positions available beginning in September, 1997. The first position is for a Senior I/O Psychologist. The ideal applicant has a strong national/international reputation as an innovative researcher in any area of industrial/organizational psychology; will reinforce the program's traditional emphasis on quantitative methodology, rigorous empirical research, and interest in application; has a history of successful extramural funding; and has an interest in working across specialty lines with colleagues in areas such as cognitive aging and engineering psychology. The successful applicant will be expected to take a leadership role in the I/O program. For the second position, rank is open. The ideal applicant for the second position has demonstrated, or has the strong potential to develop, a nationally recognized research program in any area of I/O psychology. Strong quantitative skills and applied as well as theoretical interests are highly desirable. A history of, or high potential for, extramural funding is also highly desirable. Candidates for both positions should posses excellent classroom skills and the ability to work effectively with graduate students intending careers in either academic or applied settings. Georgia Tech offers a stimulating intellectual environment, the opportunity to develop research relationships with major corporations, highly competitive salary and benefits, as well as life in one of the South's most dynamic and attractive cities. Applicant's should send a letter of interest, vita, and three letters of recommendation to: Chair, I/O Search Committee, School of Psychology, Georgia Institute of Technology, Atlanta GA 30332-0170. Georgia Tech is a unit of the University System of Georgia, and is an equal education and employment opportunity institution.

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGIST.

The State Personnel Department of Alabama is building a small team of Industrial/Organizational Psychologists to manage large selection projects, provide consultation and guidance to the Examination Division and conduct applied research in areas related to selection and human resource management (e.g. test methodologies, criterion definition, contextual performance measures, biodata measures, performance appraisal, etc.). We are committed to developing selection processes which minimize adverse impact while identifying excellent potential employees. The department is responsible for employment for over 100 agencies and departments with 35,000 employees. This individual will serve in a lead capacity for teams doing major, multi-job examination development. In addition, we will encourage and support research and publication on a broad range of issues related to human resources selection and management. Send resume to John A. Hicks, Ph.D., State Personnel Department, 367 Folsom Administrative Building, Montgomery, Alabama 36130-2301.

MANAGEMENT AND PROFESSIONAL DEVELOPMENT SENIOR CONSULTANT.

ARCO Chemical Company, located in a suburb of Philadelphia, a leading worldwide manufacturer and marketer of intermediate and specialty chemicals, seeks an internal consultant reporting to the Director of Human Resources, Planning and Development.

Responsibilities include: consulting with management to identify individual and organizational needs; designing or identifying programs that will enhance productivity of group and/or individual performance; proactively proposing and developing solutions to issues that may effect the performance of employees; researching and determining most appropriate and cost effective resources to meet training needs, designing and delivering internal training programs, including training other trainers; producing training materials, leader's guides, etc.; designing and delivering organization improvement projects such as team-building; organizing and directing the work of external consultants on various training or organizational effectiveness projects.

Requirements: Advanced degree in a Human Resources field or equivalent experience. Experience in training, organization and management development and group facilitation required. Experience in other Human Resources areas a plus. Ability to work independently on multiple projects. Ability to relate credibly to employees at all levels, including senior executives and international employees. Well developed presentation skills and strong conceptual/analytical skills. Demonstrated ability to provide creative, practical solutions to problems/opportunities. Occasional travel required.

Send resume with salary history to: John G. Howe, Director Human Resources Planning and Development, ARCO Chemical Company, 3801 West Chester Pike, Newtown Square, PA 19073

INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGIST.

GTE Telephone Operations, a leader in the telecommunications industry, is currently seeking an Industrial and Organizational Psychologist to join its Employee Capability and Competency Design Department. This department has broad responsibilities for employee selection, employee development, succession planning, and performance management. The primary responsibilities of the psychologist in this position include the development and validation of selection tools as well as research related to establishing competency requirements. This psychologist will work with a team of industrial and organizational psychologists for a variety of groups within GTE's headquarters and regional organizations across the nation.

Qualified candidates must have a Ph.D. in Organizational and Industrial Psychology as well as a strong educational background and experience in the following aspects of testing: Job Analysis; Item Writing; Validation Strategies; Research Methods; Psychometrics; Legal and Professional Guidelines for Testing; SAS, SPSS, or similar statistical package.

Candidates must have strong interpersonal skills and be able to work with a diverse team and a variety of internal clients. In addition, strong candidates must possess excellent administrative skills and demonstrated project management skills. Excellent communication skills, both oral and written, are essential.

This full time employment opportunity is located at GTE Telephone Operations Headquarters in Irving, Texas. A competitive compensation and benefit package is offered. Qualified candidates are invited to submit a resume, transcript, and references to: Nancy T. Tippins, Ph.D., GTE Telephone Operations, 700 Hidden Ridge, HQW01J52, Irving, Texas 75038.

THE PERFORMANCE CENTER OF THE INDUSTRIAL & SYSTEMS ENGINEERING DEPARTMENT AT VIRGINIA TECH

wants to hire: Consultants, Trainers, Change Leaders, Program and Project Managers, and/or Students wishing to obtain a Ph.D. in Management Systems Engineering (in the Industrial and Systems Engineering Department) who want to make a difference in the field of Quality, Productivity, Performance Improvement. We are seeking people who want to be learning leaders and want to work with others who are committed to the same purpose. This is an ongoing search with no end date. Full-time positions are non-tenure track. Salary commensurate with education and experience.

Virginia Tech is an Equal Opportunity/Affirmative Action Employer and welcomes applications from women and minorities.

Send applications packages (resume, references and a writing sample) to **Search Committee, The Performance Center, 1900 Kraft Dr, Suite 200, Blacksburg VA 24060.** E-mail: searchcom@perform.vt.edu.

CHAIRPERSON, DEPARTMENT OF MANAGEMENT, ELI BROAD COLLEGE OF BUSINESS, MICHIGAN STATE UNIVERSITY. The Department of Management is seeking a department chairperson to start August 1, 1997. The chairperson is responsible for overseeing all facets of departmental operations including academic programs, budgeting, scheduling, recruitment, personnel evaluation, tenure/promotion decisions, office staff, graduate students, and temporary faculty. The department has 12 tenure track positions, and the faculty all teach and conduct research in the areas of Organizational Behavior, Human Resource Management, and/or Strategy and Policy. The chairperson will be appointed as either a Professor of Management with tenure or an Associate Professor of Management with tenure. Therefore, this person must be able to demonstrate teaching and research excellence in one of these three areas.

The chairperson reports directly to the Dean of the College of Business and is appointed for an indefinite period. Applicants for this position should send a Curriculum Vita by December 1, 1996, to **Professor John R. Hollenbeck, Department of Management, Eli Broad College of Business, Michigan State University, East Lansing MI 48824-1121. Tel: 517 351-2513; Fax: 517 432-1111; e-mail: 22019mgr@msu.edu.** Michigan State University is an equal opportunity and affirmative action employer.

SENIOR CONSULTANT OR PROJECT MANAGER: Aon Consulting, formerly HRStraegies, is an internationally known HR consulting firm specializing in the design and implementation of creative solutions to human resource and organizational transition needs. Our staff of over 1,500 professionals includes more than 60 I/O psychologists offering exceptional service to the most recognized and innovative organizations in the world. As a member of the Aon family of companies, we offer global consulting capabilities through a worldwide network of offices.

Due to rapid growth, we are continually in search of exceptional candidates who can make valuable contributions to our team. Project work includes the construction and implementation of selection and assessment systems, performance management systems, career development programs, employee opinion surveys, and change management consulting.

We seek experienced I/O psychologists with a proven track record of superior project management and strong statistical skills with the ability to present in an applied manner. Send your resume outlining related experience to **Jennifer K. Burns, Human Resources Manager, Aon Consulting, P.O. Box 36778, Grosse Pointe MI 48236.** Aon Consulting is an Equal Opportunity Employer and a member of the Aon family of companies.

SOCIAL AND ORGANIZATIONAL PSYCHOLOGIST: Temple University invites applications for an assistant level organizational psychologist for a tenure-track position to begin Fall, 1997. The Social and Organizational Division seeks to expand the breadth of its offerings by hiring an individual with strong quantitative skills who will complement the strengths of its current faculty. We are especially interested in applicants whose research and teaching include two or more of the following: psychometrics and test theory; organizational entry; group and team processes; conflict resolution; and leadership. Successful applicants will have evidence of a strong, productive, theoretically based research program, record of or potential for obtaining outside funding, and a clear commitment to maintaining the collegiality and theoretical pluralism that distinguish the Division. Duties include teaching undergraduate and graduate courses and mentoring doctoral students.

Send a letter, CV, reprints/preprints, and three letters of recommendation by November 15, 1996 to: **Social and Organizational Search Committee, Department of Psychology, Weiss Hall, Temple University, Philadelphia PA 19122.** Temple University is an Affirmative Action/Equal Opportunity employer. This position is contingent on budgetary authorization.

ASSOCIATE RESEARCH SCIENTIST OR RESEARCH SCIENTIST. The Center for Creative Leadership (CCL), a not-for-profit research and educational institution, is seeking qualified applicants interested in joining a team conducting a major research program on executive selection. CCL currently is expanding the scope of the research program to include other issues in executive leadership, such as transitions into new roles, positions, and organizations. The new member of the research team would be expected to contribute to both streams of research.

We are seeking an individual who can conduct creative and original research studies that advance both knowledge and practice. Publication of research findings is an essential requirement. The individual will also be expected to work closely with those involved in training and other applied work at the Center and with Center clients, so that research is focused on important issues and the direct translation of findings into practice.

Please send resume to: **HR Director, Linkage, Inc., One Forbes Road, Lexington MA 02173. Or fax to: (617) 862-2355.**

INDUSTRIAL PSYCHOLOGIST: The Federal Bureau of Investigation (FBI) is seeking a full-time Personnel Psychologist, Grade GS11, GS12, or GS13. Responsibilities include performing job analyses, developing tests and other selection tools, conducting validation studies for personnel selection/promotion criteria, developing and conducting training, and performing quantitative analyses on test data. Applicants must demonstrate strong education and experience in this field, including in-depth knowledge of statistical analyses, and have competency in effectively working with management personnel. Position is located at FBI headquarters in Washington, DC. Minimum qualifications include Ph.D. (or within 6 months of completion) in Industrial/Organizational Psychology from an accredited college or university. Submit resume or vita, including details of related experience and course work, and two letters of recommendation to: **Dr. Elizabeth Kolmstetter, Federal Bureau of Investigation, Personnel Psychologist Selection, J. Edgar Hoover Building, Room 6512, 935 Pennsylvania Ave, NW, Washington, DC 20535-0001.** Selectee subject to satisfactory completion of rigorous background investigation. An Equal Opportunity Employer.

TENURE-TRACK POSITION IN I/O PSYCHOLOGY. San Francisco State University announces a tenure-track position in Industrial/Organizational Psychology at the Assistant Professor level to begin Fall, 1997.

The University is a multi-cultural urban institution located in a city of rich diversity. Candidates are preferred who have teaching and/or research experience with people from under-represented groups.

Qualifications: Ph.D. in I/O Psychology is required. Candidates must have a broad preparation across the field of Industrial/Organizational Psychology. Preference will be given to candidates who demonstrate strong preparation and research potential in Organizational Psychology topics.

Description: The position requires teaching undergraduate and Master's level graduate courses in I/O psychology and supervising student thesis research and internship projects. In addition, the candidate will be expected to teach our basic undergraduate psychology courses.

We are seeking someone who is committed to teaching and who can join the present 3 I/O faculty members in developing educational opportunities for students.

Rank and Salary: Assistant Professor, $36,300 to $45,756 for the academic year, depending on level of experience.

Application Deadline: All materials should be received by January 6, 1997.

The successful candidate should have a Ph.D. in Industrial and Organizational Psychology or related fields, five years of successful practice working directly with organizations, and a strong publications record. This scientist/practitioner should be capable of designing both lab and large scale field research. Skill in translating research findings into publications for managers and into implementable programs is highly valued. Competence in working with teams, particularly at high organizational levels, would be a strong plus factor for a candidate.

The position is located in Greensboro, NC. Travel requirements are moderate. We hope to fill the position in the third quarter of 1996. Interested candidates should submit a vita and references to **Dr. Valerie I. Sessa, P O Box 26300, Greensboro NC 27438-6300.** The Center for Creative Leadership is an equal opportunity/affirmative action employer that supports diversity in the work place.

DIRECTOR, EMPLOYEE SELECTION SYSTEMS: Manpower International, Inc., the world's largest staffing service, has a full-time position available for a Ph.D. psychologist with strong leadership skills, proven experience managing people and projects, creativity, and a strong marketing orientation. Demonstrated ability to lead and develop a professional staff is essential.

Manpower internally develops and validates pre-employment testing tools for office/clerical, light industrial and technical employees. The Director of Employee Selection Systems is responsible for content and/or criterion related pre-employment test development. This individual will create and manage all aspects related to the research, development and successful implementation of pre-employment assessment tools.

Manpower offers a competitive salary and a complete benefits package.

Interested applicants should send resumes to: **Manpower Inc, Employment Services, 5301 North Ironwood Road, Milwaukee, WI 53217 or call (414) 961-1000. EOE/AA**

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGISTS: Linkage is an organizational development and corporate education consulting company. We are a multi-disciplined team of practitioners working with our clients to develop and implement practical tools, programs, and systems that enhance the performance of their people and work processes. Job includes: organizational development, corporate training, competency modeling, and business strategy.

Positions available for experienced management consultants as well as new graduates. Ph.D. is preferred.

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGIST: Systema Corporation, a 27 year old consulting firm located in Northbrook, Illinois, specializes in sales and sales management assessment using a variety of 360 degree instruments. We are expanding our product line and consulting services to include: selection services, structured interviews, customized surveys and data interpretation to meet the needs of our growing client base.

We are seeking an Industrial/Organizational Psychologist (Ph.D. preferred, ABD accepted) who wants to make a significant contribution to an organization. This will be a highly visible position. Candidates should have at least 3-5 years experience in an applied setting and possess the following qualifications/experience: measuring and statistics; developing and validating surveys and tests; structured interviewing; job analysis; constructing selection systems; and developing competency models.

In addition to being responsible for new instrument development, this position will have some client contact and travel. Thus, strong interpersonal, writing project management, computer and consulting skills are needed to serve as a business partner to clients.

Please send a resume and cover letter to: **Systema Corporation, IOP, 60 Revere Drive, Suite 600, Northbrook IL 60062-1578. Fax: (847) 498-9176.**

SENIOR RESEARCH CONSULTANT–HUMAN RESOURCES. The mission of this position is to design and implement HR tools, services and research to meet the company's needs worldwide. Responsibilities of the position include: developing and implementing state-of-the-art tools (e.g., performance review system) that support manager and staff performance, productivity and morale; designing and conducting HR research projects to inform and stimulate management action on people and organizational issues related to business performance.

The position is part of the Executive and Management Development group in Microsoft. Microsoft is located in Redmond, Washington (approximately 5 miles east of Seattle).

Qualified candidates must have: 5+ years of experience designing, conducting, and reporting business-issue driven HR research; 5+ years experience in large organizations designing and implementing tools, products and services that meet people needs and business objectives; skill in working with line and HR managers at all levels; expertise in research design, univariate and multivariate statistics, and psychological measurement applied to people and organizational issues; knowledge of job analysis, performance management, staffing, training and development, motivation and leadership; strong written and oral communication skills, interpersonal skills, project management skills, and action orientation.

The application consists of a letter of interest and curriculum vita from the candidate; and at least 3 letters from references. All materials should be mailed to: **Dr. Julia Lewis, Chair, HRT committee, Department of Psychology, San Francisco State University, 1600 Holloway Avenue, San Francisco CA 94132.** SFSU is an Affirmative Action/Equal Opportunity Employer.

THE DEPARTMENT OF PSYCHOLOGY, SAN DIEGO STATE UNIVERSITY, invites applications for a tenure-track Assistant Professor in Industrial-Organizational Psychology to begin August, 1997. Ph.D. required. $37,140-$46,812 AY. The department has a strong undergraduate program, an M.A. program, an M.S. in Applied Psychology, with emphases in I/O Psychology and Program Evaluation, and a doctorate in Clinical Psychology. Permanent faculty generate about $4 million annually in grant support.

The university and department are committed to achieving a diverse faculty. We seek applications from members of underrepresented groups and strongly encourage women and persons of color to apply. Applicants should be engaged in organizational psychology and organizational behavior. They should have expertise in areas such as organization theory, organizational development, quality of work life, communication, management structure and theory, motivation, decision making, leadership, teams and groups. They should be familiar with personnel psychology and with areas of overlap between industrial and organizational psychology.

The successful candidate will be committed to excellence in teaching and demonstrate potential for strong research productivity. That individual will teach introductory and advanced seminars in organizational psychology in our M.S. in Applied Psychology program. The appointee will be expected to include undergraduate and graduate students in research activities. Additional teaching opportunities will include undergraduate courses in organizational psychology and specialized courses in the individual's interest areas. The capacity to contribute to graduate training in quantitative methods and psychological measurement will be expected.

Applicants for this position should send a letter of application, a statement of teaching and research interests, evidence of teaching excellence (including student evaluations, if available), curriculum vita, reprints or preprints and three letters of recommendation to the **Chair of the I/O Search Committee, Department of Psychology, San Diego State University, 5500 Campanile Drive, San Diego CA 92182-4611.** All materials should be received by November 15, 1996. SDSU is an Affirmative Action/Equal Opportunity Title IX employer, and does not discriminate against person on the basis of race, religion, national origin, sexual preference, gender, marital status, age, or disability.

skills, high energy; flexibility; initiative and strong orientation to getting things done, responsiveness to client needs; strong practical orientation grounded in solid knowledge of theory and methods; and a high degree of "social intelligence." Fluency in French, Spanish, or Mandarin Chinese will be a plus. The successful candidate will be licensable as a psychologist in Texas.

The Vandaveer Group offers competitive compensation and tremendous opportunity for professional growth and development. We are an equal opportunity employer. To apply, please send a cover letter, resume, and the names and telephone numbers of three academic and/or business references to: **The Vandaveer Group, Inc.; 520 Post Oak Blvd. Suite 260, Houston TX 77027.**

PERSONNEL DECISIONS INTERNATIONAL (PDI), a fast-growing human resources and management consulting firm, is a great place to work, to grow, and to have fun doing it! We now have more than 220 consulting psychologists, and offices in Minneapolis, Boston, Brussels, Chicago, Dallas, Denver, Detroit, Houston, London, New York, Paris, San Francisco, Singapore, Stockholm, Tampa, Tokyo, and Washington, D.C. We are a highly professional team, on the leading edge of our profession, focused on providing innovative, top-quality solutions to meet client needs. PDI serves organizations in both the public and private sectors; our clients range from Fortune 100 companies to small family businesses, in virtually all industry groups. We are interested in applicants who can meet the following descriptions:

WE HAVE AN IMMEDIATE NEED FOR SENIOR CONSULTANTS in our BOSTON, CHICAGO, and SAN FRANCISCO offices. Qualified candidates will have a Ph.D. in counseling, clinical, or I/O psychology, be licensed or license eligible in the appropriate state, and have a minimum of ten years experience, some of it in an applied business setting. Skills in assessment and test interpretation, counseling, and coaching, as well as an ability to develop business are required. Chosen candidates will have high energy, flexibility, and the desire to grow PDI's business in a new market.

There are a limited number of Associate Consultant and Consultant openings in other PDI locations. An advanced degree in psychology and applied business experience are required.

PDI offers a competitive compensation package, relocation assistance, tremendous growth opportunities, and exciting work with leading global organizations.

To apply for these or future opportunities, please send a cover letter, resume, and geographic preference to: **Joanne Pfau, Vice President of Human Resources, Personnel Decisions International, 2000 Plaza VII Tower, 45 South 7th Street, Minneapolis MN 55402. Fax: 612-337-3640.** PDI is an equal opportunity employer committed to employing a team of diverse pro-

Interested candidates should send a resume to: **Nancy Rotchford, Microsoft Corporation, One Microsoft Way, Redmond WA 98052-6399, Fax: 206/936-6450, Email: nancyro@microsoft.com.**

INDUSTRIAL ORGANIZATIONAL PH.D. PSYCHOLOGIST. Wayne State University Psychology Department is seeking a candidate for one tenured or tenured-track appointment beginning August 1997. Rank and salary are open. Applicants must have a Ph.D. in I/O psychology and be actively involved in research in some area of I/O psychology. Preference may be given to individuals whose primary interests are in organizational psychology, but all applicants will be considered. Individuals with a strong quantitative background are particularly encouraged to apply. We will accept applications until the position is filled; however interested individuals are encouraged to apply as soon as possible. Send letter of application with statement of teaching and research interests, vita, three letters of reference and reprints/preprints to: **Chair, Industrial/Organizational Search Committee, Department of Psychology, Wayne State University, 71 W. Warren, Detroit MI 48202.** Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures and vehicles at WSU are smoke-free. Wayne State University-people working together to provide quality service.

ASSOCIATE CONSULTANT TO MANAGEMENT: The Vandaveer Group, Inc., and emerging premier human resources and management consulting firm headquartered in Houston, Texas, is in search of an exceptional individual for an Associate Consultant position in the Houston office. Qualified candidates will have a Ph.D. in I/O (or related area), clinical, or counseling psychology, and two or more years of relevant experience. Responsibilities will include participation in a wide variety of consulting project and services related to leader and organization development, executive assessment and coaching, leader succession planning, process redesign and improvement, performance measurement and enhancement, employee selection and staffing, and process consultation and conflict resolution. Duties will include participation in project design and planning; data collection and analysis (quantitative and qualitative); assistance in the preparation of proposals, presentations, and reports; design and development of processes, tools, tests, and individual and team development workshops; and training for conducting individual assessments and coaching, and for process consultation.

We are looking for someone with exceptional cognitive abilities, including conceptualization and innovative thinking, as well as strong analytical skills; excellent oral and written communication skills; superior listening

SOCIETY FOR INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY

EXECUTIVE COMMITTEE

President:
James L. Farr
Dept of Psych, 615 Moore Bldg
Penn State Univ
University Park PA 16802-3104
Phone: 814/863-1734
FAX: 814/863-7002

President-Elect:
Kevin Murphy
Phone: 970/491-6007

Past President:
Michael A. Campion
Phone: 317/494-5909

Secretary:
William H. Macey
Phone: 847/640-8820

Financial Officer:
Ronald D. Johnson
1044 Pamplin
Virginia Tech
Blacksburg VA 24061-0209
Phone: 703/231-6152

Representatives to APA Council:
Richard J. Klimoski (2/94-1/97)
Phone: 703/993-1356
Irwin J. Goldstein (2/95-2/99)
Phone: 301/405-1680
Angelo DeNisi
Phone: 908/445-5972

Members-at-Large
Wayne Camara (1994-1997)
Phone: 212/713-8069
Dick Jeanneret (1995-1998)
Phone: 713/529-3015
Nancy Tippins (1996-1999)
Phone: 214/718-4991

ADMINISTRATIVE OFFICE

SIOP Administrative Office
Lee Hakel
745 Haskins Rd, Suite A
P.O Box 87
Bowling Green OH 43402
Phone: 419/353-0032
FAX: 419/352-2645

COMMITTEE CHAIRS

Awards:
Adrienne Colella
Phone:908/445-5648

Committee on Committees:
Jeff McHenry
Phone: 206/936-5405

Continuing Eduction and Workshop:
Sally Hartmann
Phone: 708/286-8181

Education and Training:
Janet Barnes-Farrell
Phone: 203/486-5929

Fellowship:
Elaine Pulakos
Phone:703/522-7885

Frontiers Series:
Sheldon Zedeck
Phone 510/642-3594

Long Range Planning:
Wayne Camara
Phone: 212/713-8069

Membership:
Karen Paul
Phone: 612/733-9925

Professional Practice:
A. Catherine Higgs
Phone: 415/833-6280

Professional Practice Series:
Manuel London
516/632-7159

Program:
John Hollenbeck (SIOP)
Phone: 517/355-2413

Timothy A. Judge (APA)
Phone: 319/335-3784

Scientific Affairs:
James A. Breaugh
Phone: 314/516-6287

Society Conference:
Katherine Klein
Phone: 301/405-5929

State Affairs:
Greg Gormanous
Phone: 318/473-6470

TIP:
Michael D. Coovert
Phone: 813/974-0482

---

fessionals. Individuals from all cultural backgrounds are encouraged to apply.

I/O PSYCHOLOGISTS - CONSULTANTS: Saville & Holdsworth Ltd (SHL) is the world's leading provider of selection and development solutions to organizations around the globe. With operations in 28 countries, we employ well over 100 consulting psychologists. SHL's North American operations are headquartered in Boston and Toronto. Specializing in the objective assessment of people and work for selections and development, we provide consulting services in the areas of designing and validating selection systems, management development services, executive assessment, customized test construction and other related areas. The design and development of a wide range of assessment tools and software applications is a key part of SHL's portfolio.

Primary responsibilities will include the provision of consulting services and participation in ongoing research projects for product development. Qualified applicants will have a Ph.D. in Industrial/Organizational Psychology with one to five years of experience in applied business or consulting settings. Successful candidates will have a solid background in psychometrics with good analytical, communication and client development skills.

We have immediate openings in our Boston, Cleveland, Toronto and Ft. Lauderdale offices. For the opening in our Ft. Lauderdale office, we would prefer experienced candidates with a considerable knowledge of Latin American/US cultural differences. A high level of fluency in Latin American Spanish (both oral and written) would also be an asset. The successful candidate for this position will spend time in our Boston office before they are assigned to Ft. Lauderdale.

SHL is and Equal Opportunity Employer providing competitive salaries, growth opportunities and a full benefits package. Please submit a cover letter and resume to: **Walter Jackson, Ph.D., Vice President, Saville & Holdsworth Ltd, 575 Boylston Street, Boston, MA 02116.**

ASSOCIATE RESEARCH SCIENTIST/ RESEARCH SCIENTIST: American Institutes for Research is seeking applicants with experience in employment equity areas, data processing, statistical analysis and technical report writing. Reqs.: Doctorate in social science research, statistical analysis, personnel administration or labor relations; litigation experience in related areas; inferential stats; analyzing complex data files; computer literate; oral and written skills. Salary negotiable. Excellent Benefits. Send resume and three work-related references to: American Institutes for Research, H.R. Dept. ABS/ARS/ASN/106, P.O. Box 1113, Palo Alto, CA, 94302. Equal Opportunity Employer.

1946
1956
1966
1976
1986
1996

THE GOLDEN ANNIVERSARY

A Celebration of 50 Years

1946 OF DIVISION 14 1996

The Society for
Industrial and Organizational Psychology
SIOP
Division 14 of the American Psychological Association
Organizational Affiliate of the American Psychological Society